T-16
N.W.P.R.R.
So Div

TRANSIT BOOK

14.113.0125

O. K.

No 48478
MADE BY
The Hicks-Judd Company
Bookbinders, Printers
Loose Leaf Systems
51-65 First St. San Francisco
★★ Give above number when ordering
Duplicate

Waldo Dec. 31-

7+00
70+80 = ditto → $\frac{-3^{0}}{241}$ $\frac{+04}{157}$ $\frac{+07}{112}$ $\frac{-04}{102}$ $\frac{+03}{57}$ $\frac{-01^{0}}{19}$ $\frac{0}{17}$ $\frac{0}{2}$ $\frac{0}{80}$ 1:1 slope

70+75 H_2O $\frac{-6^{0}}{68}$ $\frac{-17}{56}$ $\frac{-12}{19}$ $\frac{0}{17}$ $\frac{0}{2}$ $\frac{00}{9}$ ½:1 slope

69+80 $\frac{-6^{0}}{37}$ $\frac{-24}{29}$ $\frac{-23}{23}$ $\frac{0}{17}$ $\frac{0}{8}$ 1:1 slope

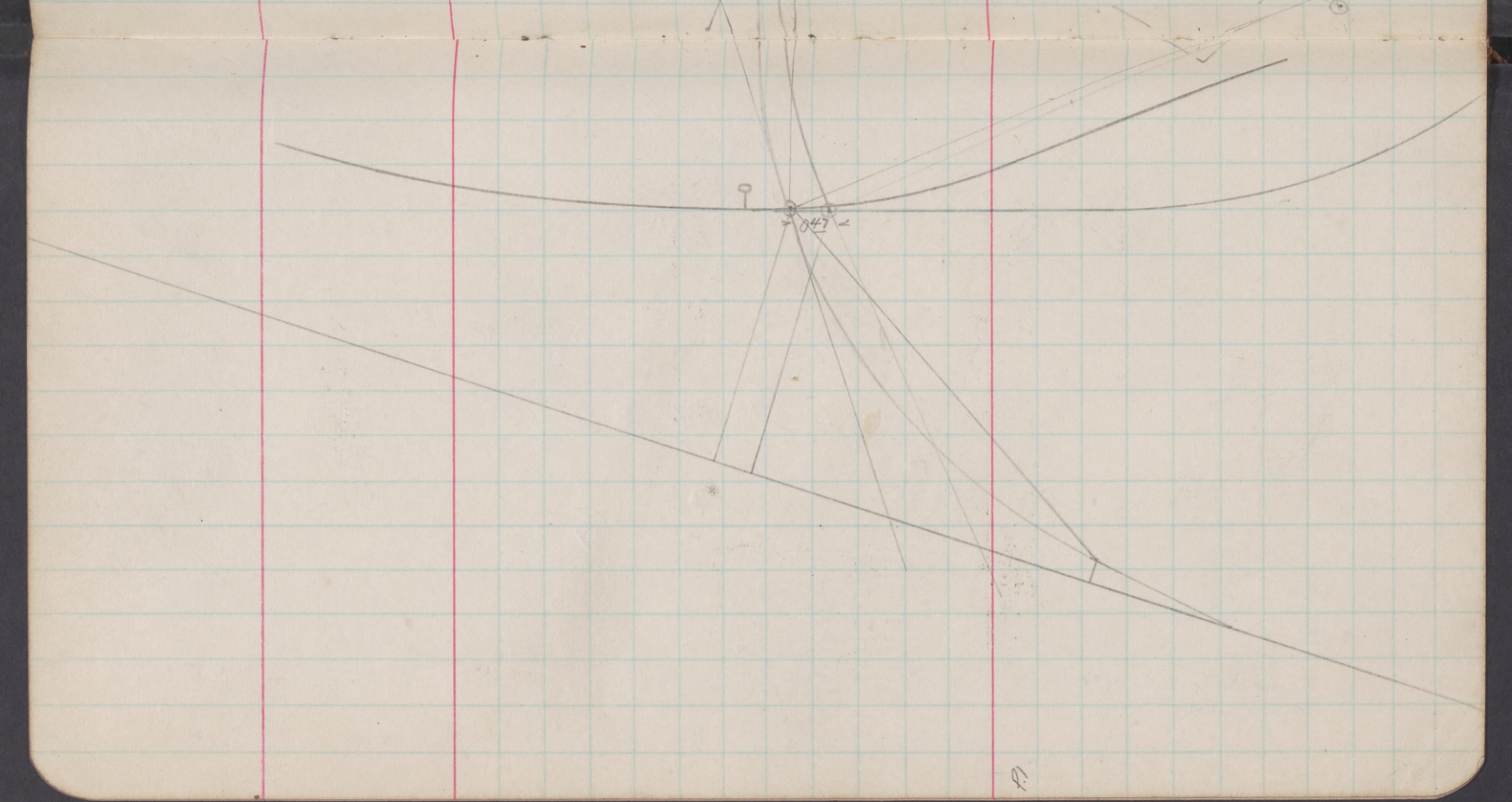
69+00 H_2O $\frac{-6^{0}}{29}$ $\frac{-08}{21}$ $\frac{-09}{18}$ $\frac{0}{16}$ $\frac{0}{0}$ $\frac{0}{2}$ $\frac{-09}{7}$ $\frac{-09}{9}$ ¾:1 slope

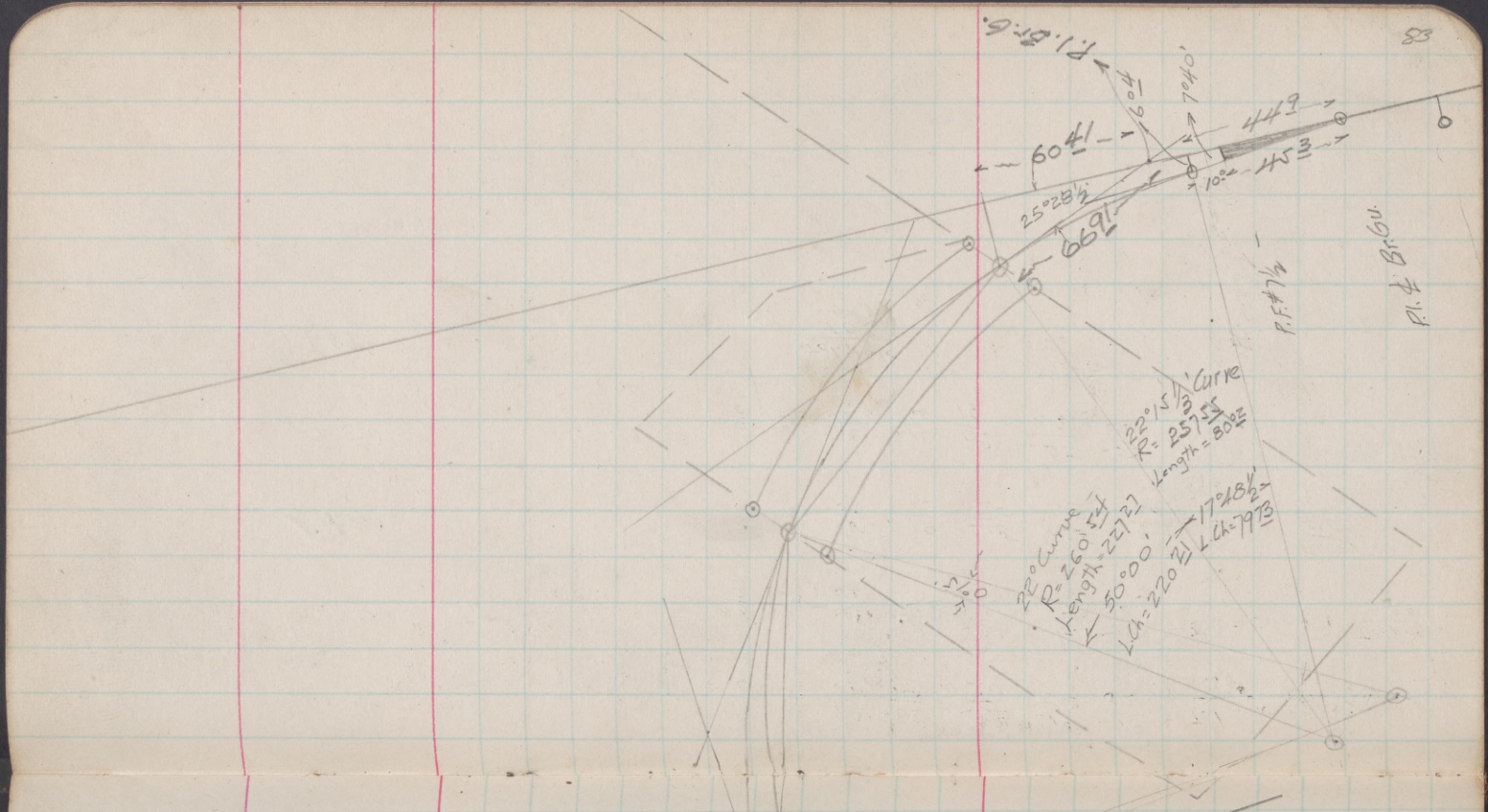
78+50				rd→	00/92	-1.9/87	-2.0/62	-00/30	0/20	0/c	00/5	1½:1 slope			
77+50				rd	+1.0/54	+0.8/44	+0.5/25	+0.5/22	0/20	0/c	0/5	-0.8/8	1:1 slope		
76+50				rd	+1.0/41	00/37	00/33	+2.3/29	+1.0/20	-1.0/19	0/17	0/c	0/5	-1.3/24	-4.0/24	-6.0/33 = H_2O
75+50				rd→	+1.3/47	+3.0/45	+3.2/35	-1.3/19	0/16	0/c	-0.0/5	-1.0/8	-0.9/11	-4.7/15	-6.0/22 = H_2O
74+00				rd→	-0.3/80	+0.7/79	+3.3/47	+2.0/26	-1.0/19	0/17	0/c	0/5	-1.0/7.0	-1.7/14	-5.4/18	-6.0/24 = H_2O
73+00				rd	-3.4/114	+1.1/88	+3.0/48	+2.8/38	-0.3/28	-1.2/19	0/17	0/c	0/5	-0.9/7	-0.3/12	+2.2/18	+1.3/23	-5.4/33	6.0/39 H_2O
72+50	-2.0/137	-0.3/115	-1.4/110	-0.3/80	+2.3/72	+3.3/52	+3.0/42	00/32	0.3/20	-1.1/19	0/17	0/c	0/11	+1.4/17	-0.5/27	-6.0/44
72+00	-3.0/157	-1.0/127	-1.1/97	+1.8/87	+3.0/57	-0.3/30	+0.7/21	-1.0/19	0/17	0/c	0/5	-1.9/16	-6.1/22

00 = E. bound ℄ WALDO - Dec. 31 - 14

J.F.B. } Last day
W.J.A. } of year.

	Lt							Rt		
82+00	-3.6 / 40	-3.4 / 28	-0.6 / 23	-0.6 / 19	0 / 17	0 / C	0 / 5	-0.6 / 9	1:1 slope	
	(38)	(16)	(11)	(07)	(5)					
81+19										
81+19	-3.0 / 40	-3.5 / 27	-1.0 / 21	0 / C	0 / 24	Same				
	(31)	15	19							
81+17	-3.7 / 40	-3.7 / 33	+0.3 / 24	+0.5 / 17.2	0 / 17.2	0 / C	0 / 17	same	+0.3 / 24	-3.7 / 33
	38	21	12	5.3				17.2		
80+00	-4.0 / 39.0	-1.0 / 30	+0.9 / 17	0 / 17.2	0 / C	0 / 4	1½:1 slope			
79+63	=rd 00 / 145	-3.2 / 140	-3.6 / 127	-4.4 / 122	-4.4 / 113	-3.4 / 110	-3.4 / 98	-3.9 / 54	-3.9 / 42	+0.6 / 29	+0.4 / 17	0 / 17	0 / C	0 / 4	1½:1 slope to H_2O
78+68	=road → 00 / 100	-4.7 / 91	-4.7 / 61	-2.0 / 52	0 / 17	0 / C	00 / 5	1½:1 slope		
78+50	rd → 00	-1.9	-2.0	-00	0	0	00	1½:1 slope		




P.I. Br. 6.
6°4'
7°40'
44 9
60 41
45 3
10°
25°28½'
66 91
P.F. #7½
P.I. ℄ Br. 6v.
22°15⅓' Curve
R = 257 55
Length = 80 02
22° Curve
R = 260 54
Length = 227 27
50°00'
L.Ch = 220 21
17°48½'
L.Ch = 79 73

0+60	0/0	00/5-2	+05/5-2	+09/14	-04/20	-14/26	-14/32	Tel pole 23
0+90	0/0	0/54	+08/5-2	+11/14	-06/22	-12/27	-17/34	-31/46 = Curb & Tel pole 34
1+30	0/0	00/5-2	+02/5-2	+10/14	-16/26	-25/30	-39/44	= Curb Palm 40
1+0-0	0/0	09/5-3	+08/5-2	+10/14	0/18	-44/28	-54/44	= Curb
1+69	Tel. pole 10							

Corte Madera Dec. 10, '14. A.M.

J.F.B.
G.L.B

all dist's from ℄ of E. bound Track

℄ Main

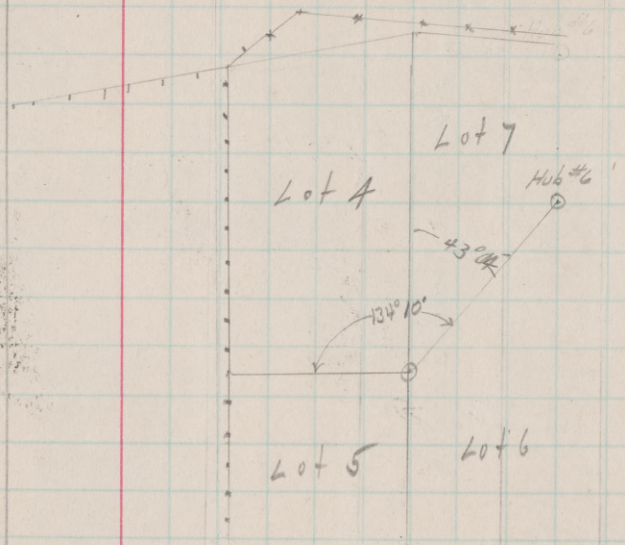
E. bound Track

18'

Spur gr = ML. gr

Note:- present end of spur = 0+00

Present End of spur	0+00	0/c	00/53	+08/53	+08/13	-0'/16	0+08/32	-10/42	Tel pole 32
	0+30	00/c	00/53	+08/53	+09/15	-02/21	-11/26	-15/40	


Lot 7
Lot 4
Hub #6
43.00'
134° 10'
Lot 5
Lot 6

Station	Meander line ∠ Lt	∠ Rt	Dist	∠ Lt side shots	∠ Rt	Dist	Objects
				81°35			
4+65 66 ft							B.S. hub #2.
				81°35'		158.36	to lot hub
				71°48'		57.5	" " "
				25°25'		20.45	" " "
					81°30'	82.45	" " "
Tel. pole	14.5 Lt of Sta 76+26						
" "	9.5 " " " 76+57						

Additional notes ↑ Waldo, Dec. 7-'14

79+54.4 — Frog pt N.G.

M 79+37.4 = POT = Frog pt BG — Frog = #10

S-0+00 = ∡ pl of set 4.1' — 5°44'

Spur fail =

Carnegie 1902 ET 10

111

0+18.31 — BC ∡ 1°39' Lt

0+93.6 — EC ∡ to tang ahead 3°20' Lt

1+49.47 — BC-∡ 1°40' Rt

1+99.47 — POC 7°27 Rt

2+49.47 — POC 9°41' Rt

2+79.47 — POC 7°00 Rt = EC Sighted to but not set on

3+20 — 3°53' Rt = pt 7° Lt of spur & acct cars

~~4+06.78~~

4+06.78 — 4°00' Rt — Transit line now 7° Lt

5+23.13 — 2°42' Rt = 1

6+52 — = End of spur

{ 2" Galv. stand pipe opp 5+6.25 - 16.2' Rt of CL.

Wooden plat form

Hi. Wa PCC

78+19.5

77+95

P.I. Curve { BCS 87+95.30 PCC 590+56.53 R = 400 L = 261.23 ∡ 37°26 R EC 595+54.47

77+52 = End of Wood plat & Fen

77+40.8 end of center Fen

76+73.3 = 8B

92

dont give B hell. Notes changed

Waldo, Dec 7- 14

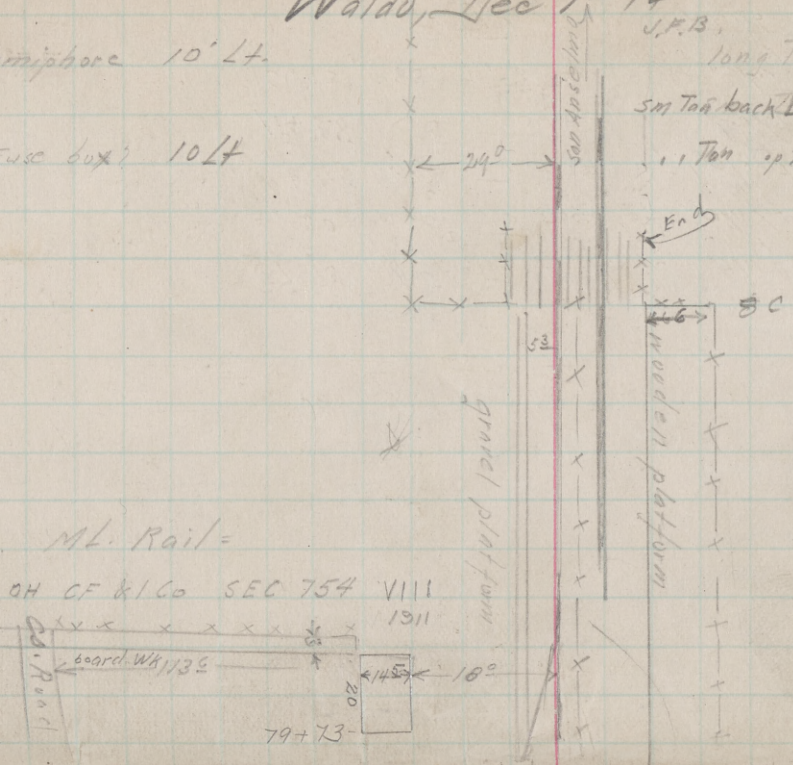
J.F.B.

Station		
83+34 I	P.O.C Main L semiphore	10' Lt.
82+97	BC±	Fuse box? 10 Lt
81+29 8	—	—
81+15 6		
80+15 5	90 T = Pt. of S.	
79+54 4	Freq pt N.G.	

long Tan Tan S 84°10 E

Sm Tan back Depot S 46°44 E

" " Tan op 73+00± S 0°49' W



Waldo Dec. 7.
J.F.B.

Triang Pt #2						
Triang pt #1						
BS to #10 S, #1		4°09'				
				57°15	197°	To toe of bluff
				49°20	333²	To toe of bluff
				61°00'	130	To toe of bluff
				114°28	55	To toe of bluff
				156°13	83	To toe of bluff
T15+48.81 #10		18°16'	464.84			To meander hub #1 = Closing Dist

Station	Meander line ∡ Lt	Meander line ∡ Rt	Meander line Dist	Side Shots ∡ Lt	Side Shots ∡ Rt	Side Shots Dist	Objects & Remarks
							Waldo Dec. 7-14 J.F.B.
"S" 3+40	45° Rt		+14 / C	+14 / 19 14' / 30	+26⁴ / 43⁵ +38 / 52	4 / 7 50° / 63°	58' / 72°
"S" 5+65	90° Rt		00 / C	00 / 15 12² / 30	24⁵ / 48° 37° / 61	49³ / 73⁵	62⁴ / 81⁵ 70⁵ / 89⁵

Hi. Wa. PI ∡ Rt = 11°09'

Hi. Wa {sta 590+56 53 / P.C.C. ∡ Rt = 12°43'

Hi. Wa. PI ∡ Rt = 15°42'

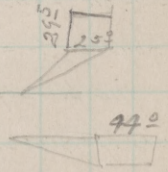
547 09'

282 37'

147 21

				57°30'	63	To Cahn in lot #2 (4³×4³) one large
				92°30'	15 2/3	To top of bluff & Fence = 7' from bluff Hub 6
				118°00'	182 5/5	To top of bluff (15 oaks in 15 oaks more)
See P. 81 for Other Notes from #6 sketch &			98°35'		91 7/7	To pt "B" see sketch upper Cor. lot #3 Hub 5
	21°11'	130 6/5				To meander hub #8
T 8+95 4/4 #6	55°51'	171 1/1				To on Sac. St. branch meander hub #7
			49°15		47 7/7	To X pt in Sac. St. fence low. side
			78°38'		82 0/0	To X pt in Sac. St fence Upp. side
				57°00	144 0/0	To top of bluff
				69°48'	121 7/7	To top of bluff
				86°45'	133 2/2	To top of bluff } highest two pts
				48°40	45 25/25	To pt on Sac St fence curve
			19°12		43 63/63	To pt "A" see sketch
			105°30'		57 2/2	To Lt front Cor of Garage } Bldg 20' x 20'
			85°00'		50 55/55	To Rt front Cor of Garage }
	20°31'	159 9/9				To meander line hub #6
T- 7+35 51/51 #5 →				116°30'	16 6/6	To pt "J" see sketch Sac St

Station	Meander line ∠ Lt	∠ Rt	Dist	Side shots ∠ Lt	∠ Rt	Dist	Objects & Remarks
					154°15'	40	To W. end of 12" Corr. Culvert
					88°15	124.7	To fence Cor. = ∠ pt
					85°53'	111.0	To toe of bluff = N. end of Pyr.
					132°26'	54.6	To fence Cor = inter pt.
12+35.11 #9		80°17'	313.7		~~85°53'~~		To meander hub #10
				47°30		—	To Cor 25'
Note: hub #9 = over ~ 12" Corr. pipe	over Culvert			55°09'		54.4	To S. Cor. bldg of bldg
					30°30'	61.25	To east Cor. of bldg
					7°55	39.7	To West Cor. of bldg
			5.05		126°45'	39.9	To East Cor of bldg
30' Co. Road					170°26'	36.0	To West Cor of bldg
10+90.06 #8		83°30	145.05				To meander hub #9 = E. edge of Co road
					92°25	65.5	To pt "C" see sketch
					114°26'	105.0	To pt "D" see sketch
					57°30'	63.0	To Cairn in lot #2 (4³ x 4³) one large
					92°30'	15.23	To top of bluff



				42°00		10	To edg of Marsh
				42°00		40°	To Toilet
setting 43' back road ∡ = 51°0' Lt					180°00	43°	30' wide on sight back to ℄ of Co road
					137°20'	110°	To toe of bluff = pt.
					18°38'	85.8	To fence to establish Line
					119°45'	29.2	To fence Cor. 4' from top of bluf
					134°00	66°	To toe of bluff
					140°00'	24°	To Toe of bluff at extreme West = Pyr. pt
					85°52'	25.4	To fence intersection & toe of hill
Δ 3+20.36 #2		85°52'	145.3	= fence line			To meander line hub #3 = ∡ in fence
				76°39'		79.9	to tel. pole & Rt ∡'s to sight = 31° to H_2O
				47°06'		60.7	To tel. pole
				24°40'		76.2	To tel. pole
				67°12		44°	To Co. pump
					96°10'	10.2	To top of embankmt & 1: slope to H_2O
				83°50		21.4	R of W. fence
ML 71+00 ROT = ∡ 1 T 0+00 Δ	83°50'		320.36				To meander line hub #2

Note:- 2" pipe line along W. side of road = galv. pipe.

Station	Meander line ∡ Lt	Meander line ∡ Rt	Meander line Dist	Side Shot ∡ Lt	Side Shot ∡ Rt	Dist Dist	Object & Remarks
					85°16'	86.6	To old prop line hub = p.o.c. of fence
					101°06'	75.15	To old prop line = p.o.c of fence
					112°56'	53.9	To old prop line hub = ∡ {= inter. of fence / = B.C. of fence}
				107°25	~~18~~	61.5	To old prop line hub (Not ∡ pt)
6+85.81 #4		45°23'	49.7				To meander line hub #5
					40°00	143.4	To top of bluff 44.5 } on sighted line back to To fence
					46°39	138.3	To top of bluff ~~23.9~~
					59°26	107.2	To top of bluff 18.0
					83°04	94.5	To top of bluff 9.6
4+65.66 #3	11°53'		220.15				To meander line hub #4
					123°06'	106	To top of bluff } 5.0 from top of bluff to fence
					124°29	66	To top of bluff
				11°00		150	To edg of Marsh } Hill on Rt Marsh on Lt
				11°30		50	To edg of Marsh
				42°00		10	To edg of Marsh
				42°00		40.0	To Toilet

Waldo Nov. 30-14 JFB

B. Street San Rafael Jan. 2-1913 J.F.B.

Station	Top of Rail Elev.	Gr. Rate	+S	H.I.	-S	Rod	Elev.
607+05	17.14		7.77	21.64		4.50	17.14
607+39.2	17.01	-0.379				4.63	✓
608+00	16.84					4.80	✓
609+00	16.45					5.19	✓
609+50	16.25					5.39	✓
610+00						5.68	✓
610+51.9	15.68	-0.394				5.96	✓
611+20	15.58					6.06	✓
611+30	15.54	-0.54				6.10	✓
611+80	15.27					6.37	✓
612+00	15.09	-1.03				6.55	✓
612+50						7.06	✓
613+00	14.06					7.58	Not set

3.87 S.W Cor Bolt Sig B-18.5

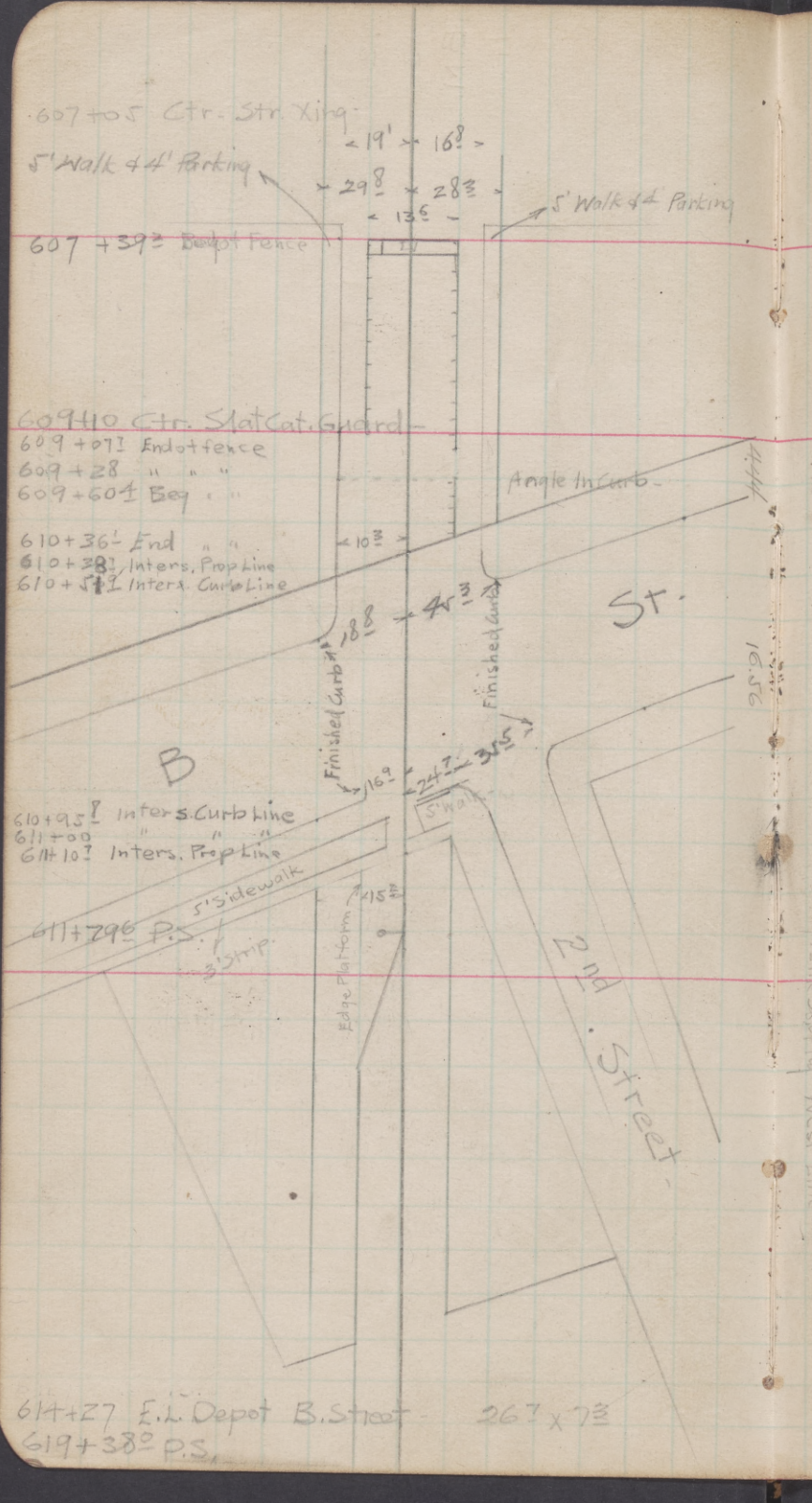
B Street (Cont.)

21.00

610+75	℄ Str. 'B'	4.68	16.32	16.8/70 16.5/45 17.0/15 16.3 16.3/9 15.1/20 14.4/50
610+96	Along Gutterline	4.93	16.07	16.4/80 16.0/58 16.4/40 16.3/28 15.8/24 16.1 15.1/9 14.7/17 14.3/40
11+20		5.20	15.80	Building → 16.3/14.6 16.3/10.6 16.1/10.6 15.5 15.2/4.6 16.74/4.6 16.75/16 15.2/16 Sidewalk Platform
12+00		5.91	15.09	Fence → 15.2/12 14.6 14.3/5 16.0/5 16.0/16.8
13+00		6.94	14.06	13.3/8 13.7/4 13.7 13.5/14 14.8/14 14.7/31 Fence Garden
B.M.		7.13	13.87	On S.W. Cor. Foundation Block Sig. #185
14+00		7.82	13.18	9.0/30 10.0/20 13.4/15 13.7/5.2 13.2/5 12.8 13.0/7 13.3/19 13.6/19 13.6/29 ← Depot Platform

"B" Street San Rafael Jan. 2-1915 J.F.B.

Station	Top of Rail Elev.	Gr. Rate					


607+05 Ctr. Str. Xing
5' Walk 44' Parking
19'
16.8'
29.8'
28.3'
13.6'
5' Walk 44' Parking
607+39.3 Depot Fence
609+10 Ctr. Stat. Cat. Guard
609+07.1 End of fence
609+28 " " "
609+60.4 Beg. " "
610+36.1 End " "
610+38.1 Inters. Prop Line
610+51.1 Inters. Curb Line
Angle In Curb
10.3'
18.8'
47.3'
St.
Finished Curb
Finished Curb
B
16.9'
24.7'
35.5'
610+95.1 Inters. Curb Line
611+00 " " "
611+10.1 Inters. Prop Line
5' sidewalk
611+79.6 P.S.
3' strip
15.3'
Edge Platform
2nd Street
614+27 E.L. Depot B. Street 267 x 7.3
619+38.0 P.S.

B Street — X-Sections; Ele's Curb, Gutter, Unfinished Paving, Etc. (74)

Nov. 2-1914

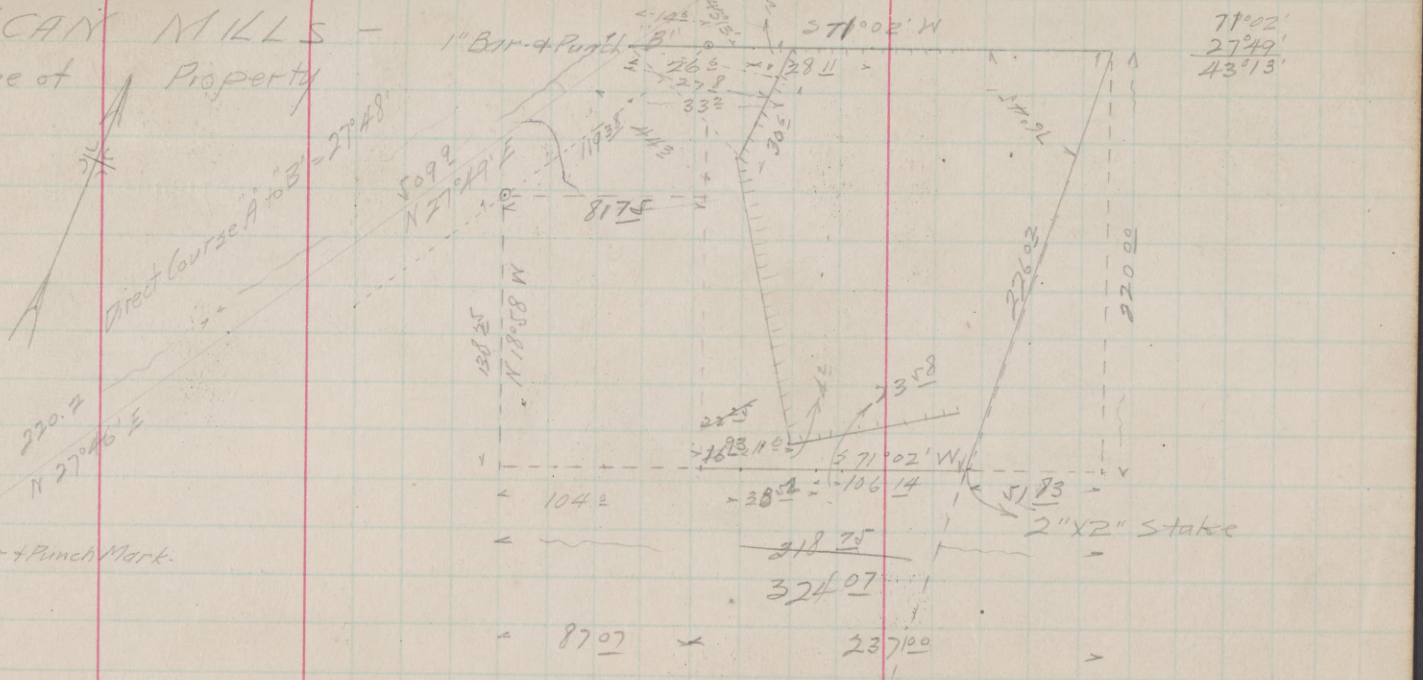
W.S.R.
W. Andrews.

B.M.	011	26.97		26.860	N.W. Cor. Bolt Sig. B. 18. 2
	2.46	21.12	8.31	18.66	
	5.56	21.03	5.65	15.47	
607+05	Ctr. Xing		3.89	17.14	
607+39	Prop. Line		4.02	17.01	
8			4.01	17.02	
9			3.93	17.10	
0	3.91	21.00	3.94	17.09	
+50			3.95	17.05	
610+51	Along Gutterline		4.43	16.57	
			3.65	17.35	Top of Curb 2nd of Prop. Line N.W. Cor 2nd & B. Sts.
			4.72	16.28	" " " " S.E. " " " "
			5.89	15.11	" " " So. Ry. Prop. Line East Line B St.
			5.40	15.54	" " " Prop. Line So. of Ry West Line
			4.44	16.56	

19.8	18.2	16.9		16.8	15.6	14.8	14.5	
75	55	30	17.1	11	28	54	85	
16.5	16.1	15.6	16.3		16.6	14.8	15.0	15.4
28	17.2	17	7	16.6	6	19	19.2	30
16.8	16.3	15.7	16.8		16.4	14.8	15.1	15.5
28	17.2	17	6.5	16.6	6.5	19	19.2	30
17.0	16.6	16.0	17.2		16.5	15.2	15.7	16.0
29	18.2	18	6.5	16.7	6.5	18	18.2	39
17.2	16.7	16.2	17.1		16.7	15.5	15.8	16.2
33	23.2	23	6	16.7	6	13	13.5	25
17.0	16.4	17.0	17.3		16.2	15.0	14.5	
70	45	27	9	16.6	10	20	45	

- DUNCAN MILLS -

Exchange of Property



- Duncan Mills - X-ing Frogs on Wye -

(73)

Need Plates 2'6" x 2'6" x $\frac{5}{8}$"

10-23-41

Bridge 77-D In Dangerous Condition

46 + 60.

47 + 24 3/5 E. E. Trestle

-4 8/20 -1 8/12 3 8/00 5 3/7 12 2/14 14 1/20

-1 8/28 7 7/18 9 5/00 10 5/7 12 2/9 13 5/14

-MARKHAM- X-Sections On Trestle - New Line

Ele-00 = High Tide October 20, 1914

Top of Rail On Trestle = 13 5

W.J.R.
{W. Andrews
E.L. Berry

13 44+19 5

44+26 8 N.E. Trestle.

-2 1	3 2	6 7	7 9	10 4	13 1
13	10	6	00	7	14

44+55

-7 0	-1 8	2 1	4 1	12 0	12 3
15	6	00	10	11	14

45+05

-8 8	-18	3 7	5 8	13 2
20	00	7	13	17

45+65

-9 0	-18	2 4	7 2	15 0
25	00	7	17	20

46+25

-10 5	-1 8	5 9	12 5	14 0
25	00	7	15	20

4+95	+12	+12	-2	+10	+10	00	-5	-5	-5	-5	-6	-7	-4
F.S. on 2+06	975	875	825	675	580	560	490	375	240	175	110	60	25
Δ 80° Rt													

2+06	+15	+15	-3	00	+7	+7	00	-9	-7	-3	-1	-3	-3
B.S. on 0+00	1000	930	900	850	830	675	600	475	360	260	140	60	25
Δ - 65° Rt													

2+06 B.S. on 0+00 14°30' Lt 530' Elc 00

" " " 3°00' Lt 550' Elc. 00

" " " 5°10' Rt 530' " 00 to Pt "F"

Pt "F" F.S. on 2+06 Slope ¾ to 1 00 -5 -7 -9 -4 00 +8 Slope ½ to 1

Δ 410 400 340 210 100 700

Δ - 80° Intersect Line of old Trestle at 280'

22+22
F.S. at 17+90
Δ - 90°00'

+12	+8	00	-2	+2	-4	+3	00	-6	-9	-13	-19	-11
1000	925	800	625	560	500	450	360	275	220	90	50	25

17+90
F.S. on 16+05
Δ 75° Rt

+12	+8	00	-2	+10	+8	00	-3	-7	-9½	-12	-15	-10
1150	840	810	750	640	530	440	400	276	180	90	60	30

12+85
F.S. on 10+80
Δ - 70° R-

+15	+12	+4	-1	+8	00	-6	-11	-13	-10	-7
1200	860	760	630	530	400	270	160	125	60	25

8+25
F.S. on 4+95
Δ - 90° Rt

+12	+10	-3	+6	+7.5	00	-6.5	-5	-5	-10	-13
1100	850	750	650	520	460	360	320	135	70	30

476 125

Sta "B" F.S. on 39+95 $\frac{+12}{850}$ $\frac{+4^{\circ}}{440}$ $\frac{+10}{375}$ $\frac{00}{350}$ $\frac{-7^{\circ}}{200}$ $\frac{-29^{5}}{120}$ $\frac{-32^{\circ}}{100}$ $\frac{-20^{5}}{60}$ $\frac{-10^{5}}{25}$ 00 $\frac{}{2}$
Δ - 90°00'

39+95 - F.S. on 33+87 $\frac{+12}{1200}$ $\frac{+6^{\circ}}{680}$ $\frac{00}{625}$ $\frac{-9^{\circ}}{480}$ $\frac{-11^{\circ}}{350}$ $\frac{-9^{\circ}}{200}$ $\frac{-13^{\circ}}{110}$ $\frac{-11^{5}}{50}$ $\frac{-13^{5}}{25}$ 00
Δ - 70°00' Rt

~~Note - 00 = Actual 6⁵~~
Corrected - 00 = + 4°
= High Tide
10-20-1914

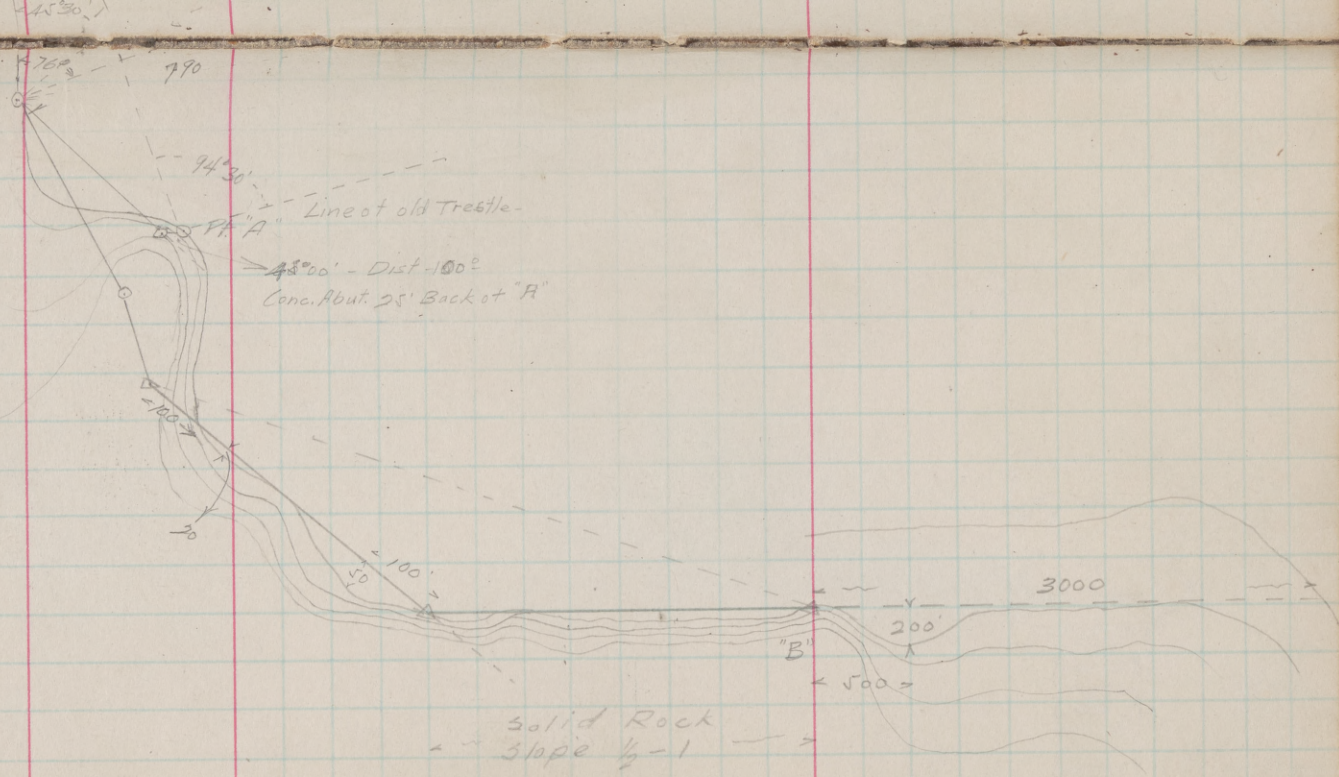
"A" Foresight on 22+22 $\frac{+10}{540}$ $\frac{00}{510}$ $\frac{-8}{330}$ $\frac{-11}{220}$ $\frac{-12}{100}$ $\frac{-15^{5}}{50}$ $\frac{-18}{25}$ 00
Δ - 90°00'

30+41 F.S. on 22+22 $\frac{+20}{1000}$ $\frac{+10}{770}$ $\frac{00}{720}$ $\frac{-5}{540}$ $\frac{-8}{340}$ $\frac{-10}{220}$ $\frac{-8^{5}}{170}$ $\frac{-10}{100}$ $\frac{-10}{75}$ $\frac{-11}{50}$ $\frac{-12}{25}$ 00
Δ 76°00' Rt -

" At 790' Intersect Line of East End Old Trestle - Trestle Ends 50' Toward Markhams -

26+18 - F.S. on 22+22 $\frac{+12}{990}$ $\frac{+8}{815}$ $\frac{00}{790}$ $\frac{-4^{5}}{660}$ $\frac{-1^{5}}{530}$ $\frac{-5^{5}}{380}$ $\frac{-8}{200}$ $\frac{-10}{75}$ $\frac{-11}{50}$ $\frac{-12}{25}$
Δ 80°00' Rt

Δ - 80° Intersect Line of old Trestle at 280'


45°30'
76°
790
94°30'
Line of old Trestle
Pt. "A"
45°00' - Dist. 100°
Conc. Abut. 25' Back of "A"
100
20
50
100'
3000
200'
"B"
500
Solid Rock
Slope ½-1

End of Old Bents of Trestle.
℄ Old Trestle.
58°10'
1250
91°42'
45°30'

760
790

Transit △	Backsight on	Horiz. Angle	Vert Angle	Rod Readings			Interval
32+97							
33+87	32+97	26°30' Lt	-7°09'	1.75	4.80	7.84	6.09
"	"	49°30' Lt	-3°33'	0.40	6.50	12.55	12.15

26+18	22+22	17°53' Rt	-0°07'	3.81	4.60	5.40	1.59
27+77	26+18	30°05' Lt	+2°07'	4.51	4.80	5.09	0.58
22+22	17+90	6°39' Lt	-0°14'	1.93	6.00	10.12	8.19
30+41 (9ft Above High Tide)	22+22	53°16' Lt	+5°43'	3.35	4.60	5.85	2.50
30+41	22+22	27°37' Lt	+13°30'	3.32	4.60	5.88	2.56
32+97	30+41	18°33' Rt	+4°41'	4.35	4.80	5.25	0.90

Transit At- Backsight on Horiz. Angle- Vert. Angle-

			Rod Readings			Interval
10+80 Ele 15.2						
12+85 Ele-15.2	10+80	5°23' Lt	-1°00'	2.80	4.40	6.00	3.20
16+05 9± Ele.	12+85	16°47' Lt	+2°56'	3.99	4.91	5.84	1.85
17+90 Ele-19.9	16+05	20°05' Lt	-0°16'	2.56	4.72	6.88	4.32
Ele. 17.1 17.5 = 20.0 0 = +2.5 High Tide = +4.0							
22+22 (With Foresight on)	17+90	0°51' Lt	Tie to Const. Line.				
22+22	17+90	1°03' Rt	-0°42'	2.76	4.69	6.67	3.96

1337+83.67
6+35.8
1344+19.5

(67)

San Francisco

1337+83.67

0°51'

1344+19.5 = 22+22 △

Commencing at 1324+05 L3 and thence Eastwardly- 206 Feet to Pt on Bank of River; thence West

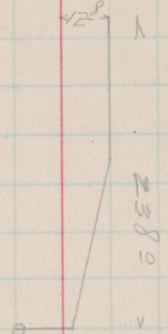
Transit at -	Backsight on	Horiz. Angle	Vert. Angle	Rod Reading			Interval
1324+05 L3 Ele-205	=0+00 "M" Line	0°00'	-0°10'	3.30	4.38	5.36	2.06
2+06 Ele-199	0+00	163°51' Rt	-0°19'	3.56	5.00	6.45	2.89
4+95 Ele. 183	2+06	3°45' Lt	-0°25'	2.95	4.60	6.25	3.30
8+25 Ele 159	4+95	5°57' Lt	-0°10'	3.02	4.80	5.57	2.55
10+80 Ele-152	8+25	18°18' Rt	0°00'	3.58	4.60	5.63	2.05

N. J. Richards
{ N. Andrews
G. L. Berry -

10-20-14

- Doda's Spur -

1326+39.9	End of Spur.
1324+64.2	P.E.
1324+01.9	Pt. Stub Switch -



96.81

1993

3.02 93.79

1.38 95.43

89.08

6.71 95.79

Top-of-Rail At
All Three Trestles.

3.10 92.69

6.35

11 1/2
16 3/4
5 3/4
34
5/39" = 3'3" = 3 5/39

82			5.4	91.4	
⊙ On Rail-82	2.56	94.96	5.41	91.40	
83			4.3	90.7	
84			4.5	90.5	
85			4.9	90.0	
86			4.8	90.2	
87			4.5	90.5	6.50
88			3.6	91.4	5.40
⊙ On Rail 88	5.47	96.81	3.62	91.34	
89			4.4	92.4	4.42
+			4		
90			4.17	92.64	
+					
91			4.4	92.4	
B.M.			7.78	89.03	Head Spike In Tel. Pole
92			4.16	92.65	

100.00 Spike In Tel. Pole 20' Rt of Sta - 1973+25

1.14 101.14

1972+21.55 E.C.			4.85	96.29					3.23	96.71	
73			5.41	95.73							
74			6.09	95.05							
75			6.81	94.33	94.33	75+30			2.59	94.12	
76			7.66	93.48	94.01	+80			2.91	93.80	
⊙ On Rail 76	3.33	96.81	7.66	93.48	93.73	76+30			3.19	93.52	
77			3.94	92.87	93.49	+80	7+15 - 3.56		3.43	93.28	
78			4.05	92.76	93.29	77+30	+65 - 3.74		3.63	93.08	
79			4.3	92.5	93.13	+80	8+15 - 3.87		3.79	92.92	
80			4.6	92.2	93.01	78+30	+65 - 3.96		3.96	92.80	
81			5.1	91.7	92.93	+80	9+15 - 4.02		3.99	92.72	
					92.89	79+30			4.03	92.68	
82			5.4	91.4					4.03	92.68	

5.52 94.60

89.08

1.91 92.99

Original Estimated

Account Change Grade.

Total

11-25-11

- VALLEY FORD - Raise Grade ½ Mile East.

Sta	+	H.I.	-	Elev.	Grade	Sub-Grade	Slope Stakes Lt.	℄	Rt.
		94.98							
1993+17.22					94.34	93.3			
+50			0.10	94.88	94.88	93.9			
B.M.			5.90	89.08	Spike on Tel. Pole 15' Rt of 1990+75				
⊙	5.77	100.48	0.27	94.71		7.40	96.48		2.14 94.34
4			4.73	95.75	95.705				
+50			3.98	96.50	96.53				
5			3.14	97.34	97.355				
+50			2.33	98.15	98.18				
6			1.49	98.99	99.005				

+ Vert. Curve

Yardage - 3800 yds

3998 Yds - Tel

550 " Cut

4543 Total

1972+00 = 1972+16 Approx Corrected Sta-

									+4.6 / 13.9	+4.9	+4.1 / 13.2
0	8.01	94.98	4.34	86.97							
+50			7.19	87.79	92.69	91.7					
9			6.76	88.22	92.69	91.7					
+34				88.32						+4.4	
+50			6.60	88.38	92.69	91.7					
90			5.93	89.06	92.69	91.7					
24				89.46						+3.2	
+50			5.12	89.86	92.69	91.7			96.48		
1			4.39	90.59	92.69	91.7					
+17.22					92.69	91.7	3.79				
+50			3.52	91.46	92.77						
+67.22					92.85	91.8	3.63				
2			2.63	92.35	93.0						
+17.22					93.18	92.2	3.30				
+50			1.75	93.23							
+67.22					93.68	92.7	2.80				
3			0.91	94.07	93.0						

Curvilinear

-VALLEY FORD- Raise Grade ½ Mile East- (63)

Sta.	+	H.I. 91.31	-	Elev.	Grade	Subgrade	Slope Stakes L	℄	R
1982+92.2 Trestle-									
3		3.90		87.41	92.69	91.7	+4.2 / 13.3	+5.3	+3.9 / 12.8
+25.0	"								
+50		4.15		87.16	92.69	91.7	+4.6 / 14	+5.5	+4.1 / 13.1
4		4.38		86.93	92.69	91.7	+4.6 / 13.9	+5.8	+4.3 / 13.5
+50		4.63		86.68	92.69	91.7	+5.6 / 15.4	+6.0	+5.0 / 14.5
5		4.73		86.58	92.69	91.7	+5.2 / 14.8	+6.1	+5.0 / 14.5
+50		4.83		86.48	92.69	91.7	+4.8 / 14.2	+6.2	+5.0 / 14.5
6		4.90		86.41	92.69	91.7	+5.0 / 14.5	+6.3	+4.7 / 14.0
+50		4.96		86.35	92.69	91.7	5.0 / 14.5	+6.3	+4.7 / 14.0
7		4.86		86.45	92.69	91.7	+5.0 / 14.5	+6.2	+5.1 / 14.6
+50		4.69		86.62	92.69	91.7	+4.4 / 13.6	+6.1	+3.3 / 12.0
8		4.20		87.11	92.69	91.7	+4.2 / 13.3	+5.6	+4.2 / 13.3

Level

0	1.71	94.83	7.51	93.12						
+50			2.05	92.78	93.13					
7			2.50	92.33	92.91	3.63	3.63			
+50			2.96	91.87	92.76	91.7	3.78	8.0 / +0.6	+00	8.0 / -0.6
8			3.43	91.40	92.69	91.7	3.85	11 / +2.7	+00	7.6 / +1.0
+50			3.90	90.93	92.69	91.7		+4.3 / 13.5	+1.8	+0.3 / 7.5
9			4.37	90.46	92.69	91.7		+6.3 / 15.5	+2.2	+1.0 / 8.5
+50			4.83	90.00	92.69	91.7		+6.9 / 17.4	+2.7	+1.0 / 8.5
1980			5.30	89.53	92.69	91.7		+6.7 / 17.0	+3.2	+2.0 / 10.0
+50			5.77	89.06	92.69	91.7		+7.0 / 17.5	+3.7	+2.8 / 11.2
1			6.19	88.64	92.69	91.7		+5.4 / 15.1	+4.0	+3.3 / 12.0
+50			6.59	88.24	92.69	91.7		+4.4 / 13.6	+4.4	+3.8 / 12.7
2			6.93	87.90	92.69	91.7		+4.0 / 13.0	+4.8	+3.7 / 12.5
0	3.70	91.51	7.22	87.61						
+50			3.69	87.62	92.69	91.7		+4.2 / 13.3	+5.1	+13.6 / 12.4

Vert. Curve

Slope Stakes -

	Lt	Rt
	8.0 / +0.6	8.0 / -0.6
	11 / +2.7	7.6 / +1.0
	+4.3 / 13.5	+0.3 / 7.5
	+6.3 / 15.5	+1.0 / 8.5
	+6.9 / 17.4	+1.0 / 8.5
	+6.7 / 17.0	+2.0 / 10.0
	+7.0 / 17.5	+2.8 / 11.2
	+5.4 / 15.1	+3.3 / 12.0
	+4.4 / 13.6	+3.8 / 12.7
	+4.0 / 13.0	+3.7 / 12.5
	+4.2 / 13.3	+13.6 / 12.4

Sta -	+	H.I.	-	Ele.	Grade	Sub Grade		
B.M.				100.00	Spike In Tel. Pole 20' Rt of 1973+10			
	0.63	100.63						
1970			2.36	98.27				
+50			2.90	97.73				
1			3.44	97.19				
+50			3.88	96.75				
2			4.31	96.32				
+50			4.65	95.98		95.98		
3			5.01	95.62		95.62		
+50			5.30	95.33		95.26		
4			5.70	94.93		94.89		
+50			6.04	94.59		94.53		
5			6.46	94.17		94.17		
+50			6.87	93.76		93.81		
76			7.31	93.32		93.45	3.09	96.54

- Valley Ford -
Raise Grade ½ Mile East.

9-5-44 } W.S.P.
9-7-44 }

- ESCALLE -

Stadia Readings for Topographic Map of Drainage Area to 13'-1" & 13'-0"

9-2-14

For Plan See 53-4

86° 00' Rt	+13°45'	3.50	7.12	½	Full Reading	724
113° 15' Rt	+12° 00'	2.00	6.02	½	" "	804
125° 10' Rt	+12° 05'	4.00	8.86	½	" "	972
Sta. ③ 138° 30' Rt	+10° 29'	4.50	6.79	½	" "	558
② 18° 31' Rt						
167° 45' Rt	+ 4° 33'	3.00	5.97		Full Reading	297
153° 15' Rt	- 1° 02' ✓	4.29	6.12		" "	181
99° 45' Rt	- 1° 29' ✓	4.50	5.94	½	" "	288
70° 30' Rt	- 16° 32'	4.00	6.05		Full Reading	205
94° 00' Rt	- 4° 02' ✓	3.50	5.54	½	" "	408
70° 30' Rt	- 10° 07'	3.00	6.38		Full Reading	338
84° 30' Rt	- 3° 15' ✓	1.83	6.50		" "	407
55° 15' Rt	- 6° 06'	4.00	6.46	½	Reading	492

Transit at	Back sight on	Horiz. Angle	Vert. Angle	Readings L	Readings UP		
(1)	(2)	125° 25' Rt	+14° 27'	2.00	8.00	½ Reading	1200
		79° 05' Rt	+ 7° 27'	3.00	7.20	" "	840
		122° 55' Rt	+16° 10'	3.00	10.30	" "	1460
		76° 30' Rt	+ 9° 10'	2.00	10.18	Full Reading	818
		114° 40' Rt	+18° 13'	5.20	12.33	½ "	1426
		74° 30' Rt	+12° 55'	8.00	7.93	½ "	986
		61° 00' Rt	+13° 18'	1.00	5.95	½ " "	990
		106° 00' Rt	+15° 55'	4.00	10.30	½ " "	1760
		88° 25' Rt	+14° 04'	4.20	10.00	½ " "	1160
		38° 30' Rt	+10° 43'	3.70	7.60	½ " "	780
		44° 00' Rt	+13° 30'	3.00	6.85	½ " "	770
		101° 15' Rt	+10° 09'	3.00	8.00	½ " "	1000
		46° 40' Rt	+ 8° 58'	2.00	5.07	½ " "	614
		115° 30' Rt	+14° 56'	4.50	9.55	½ " "	1010

— ESCALLE —

Stadia Readings for Topographic Map of Drainage Area-13-L" & 13-0"

9-2-14

N.S.

For Plan See 53-4

		Rod Readings L	Rod Readings UP	Interval	
20° 45' Rt	+ 2° 00' ✓	3.00	8.23	5.23	
113° 20' Rt	+ 2° 37' ✓	4.00	6.47	2.47	
22° 00' Rt	+ 4° 00' ✓	2.00	7.51	5.51	
135° 25' Rt	+ 10° 50'	3.00	7.17	4.17	
146° 20' Rt	+ 8° 29'	3.00	6.56	3.56	
30° 55' Rt	+ 1° 10' ✓	3.00	7.45	4.45	
137° 40' Rt	+ 10° 46'	3.00	7.87	4.87	
143° 00' Rt	+ 11° 39'	4.00	10.50	6.50	
53° 30' Rt	+ 1° 35' ✓	3.00	7.41	4.41	
151° 10' Rt	+ 11° 00' ½	4.00	9.85	5.85	11.70
64° 40' Rt	+ 1° 45' ✓	3.00	6.87	3.87	
139° 25' Rt	+ 12° 40' ½	5.00	9.55	4.55	9.10
57° 00' Rt	+ 10° 05'	3.00	9.04	6.04	
134° 25' Rt	+ 12° 45'	2.00	11.86	9.86	
70° 45' Rt	+ 9° 40'	3.00	9.62	6.62	

Transit at	Backsight on	Horiz Angle	Vert. Angle	Reading
①	② 1	0°00'	0°00'	386 ?
		180° 15' Lt	0° 00'	223.
		13° 10' Lt	0°00'	390.
		157° 55' Lt	0°00'	270.
		23° 45' Lt	0° 00'	412.
		150° 40' Lt	0° 00'	378.
		39° 05' Lt	0°00'	448.
		148° 45' Lt	0°00'	490.
		54° 20' Lt	0°00'	502.
		150° 50' Lt	0°00'	592.
		61° 20' Lt	0°00'	593. Bank of Slough - 38' Wide 5' Deep
		155° 30' Lt	0°00'	708. " " " 20' Wide 4' "

← Distances to Nearest Bank of Slough on East side of Base Line

Note - For North Terminus of Slough See Sketch on Page # 53

Rd Readings Interval

Pile .15
Driv. 60. ea.

ESCALLE

Showing Situation at 13"2" & 13-0"

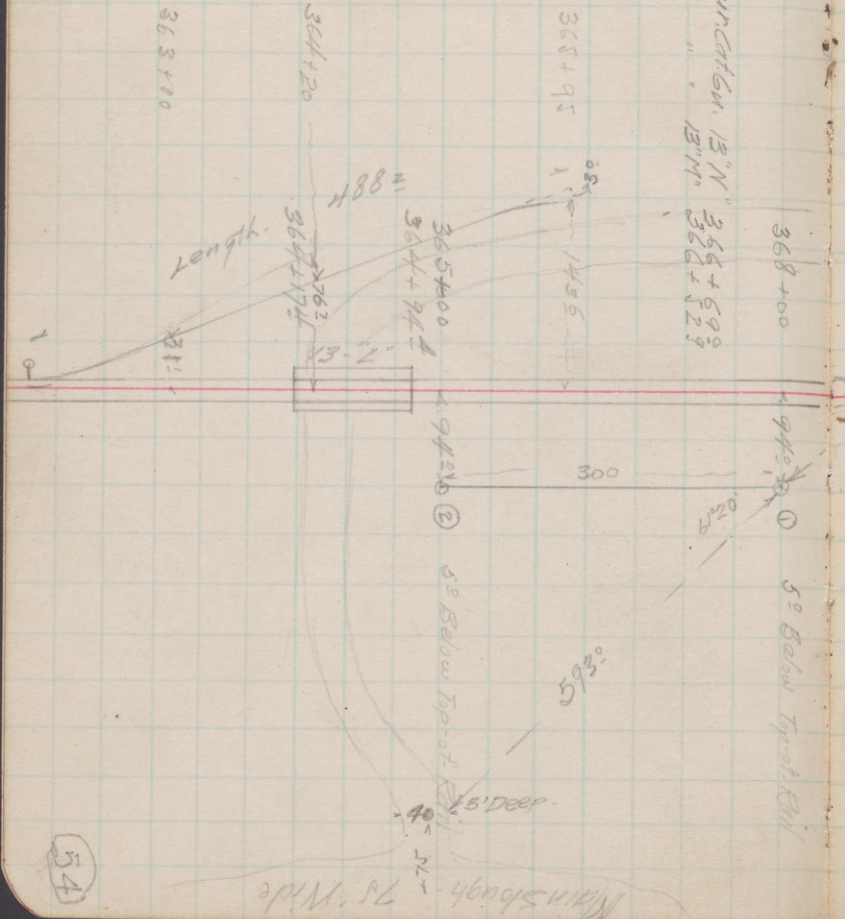
Base Line for Stadia Work-

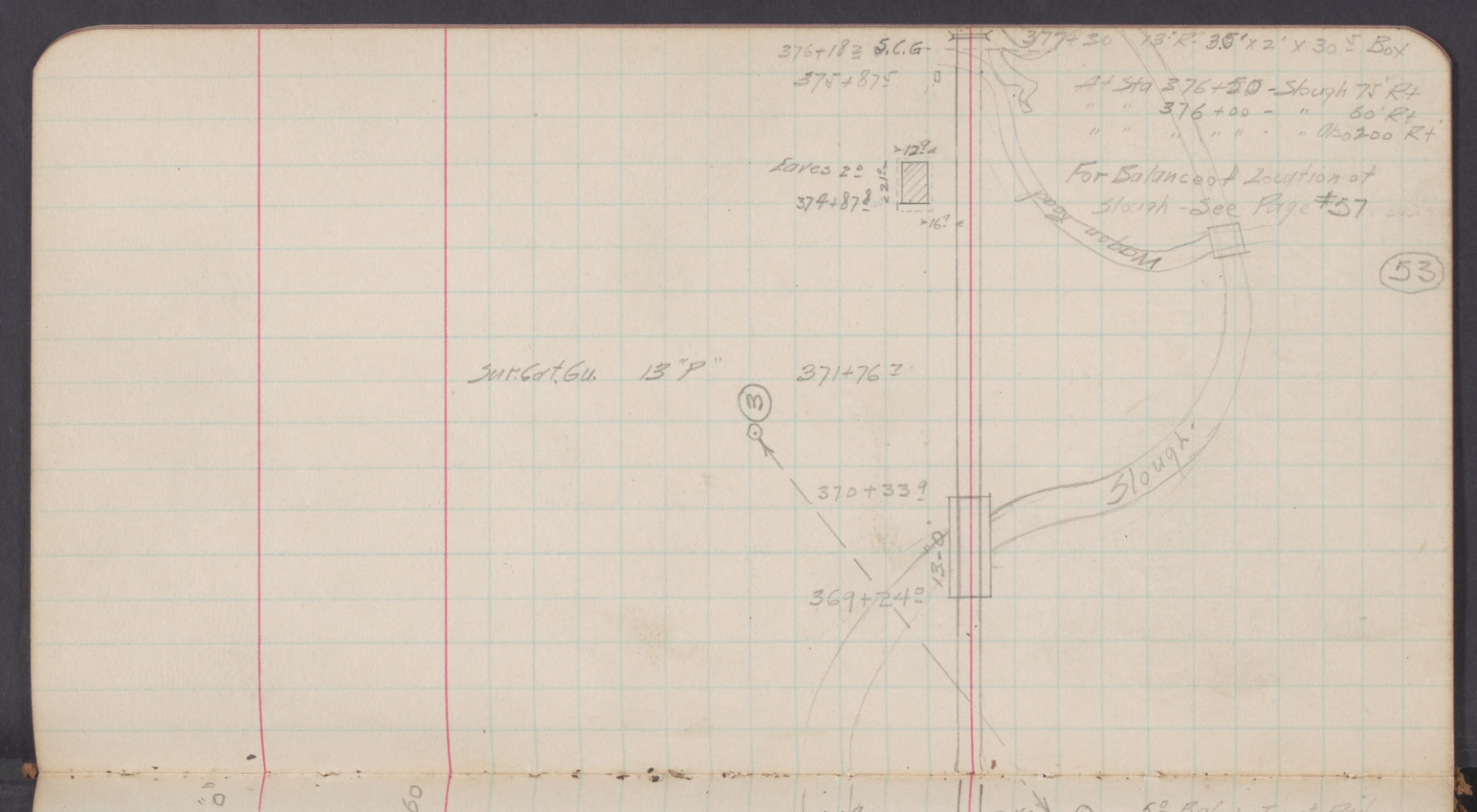
Location of Slough, etc-

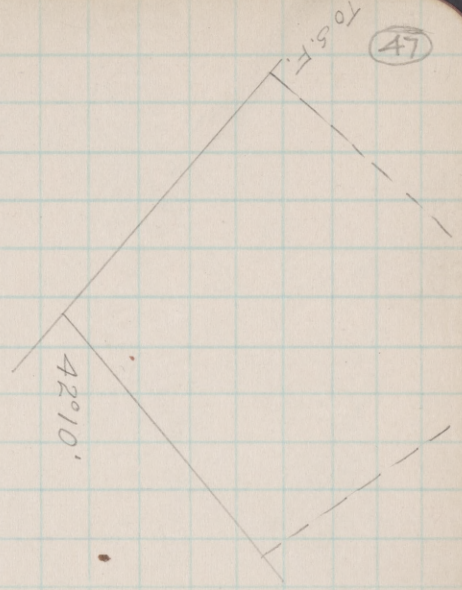
For Stadia Data- see Pages 57-60

9-2-14

W. H.




376+18 S.C.G.
375+87.5
377+30 13"R 3.5'x2'x30.5 Box
At Sta 376+50 - Slough 75' Rt
" " 376+00 - " 60' Rt
" " " " " - " Also 200 Rt
For Balance of Location of Slough - See Page #57
Eaves 2.0
374+87.8
12.9
21.0
16.9
Wagon Road
53
Sur. Cat. Gu. 13"P"
371+76.7
3
370+33.9
369+24.0
13-0
Slough
60


70.5.F.
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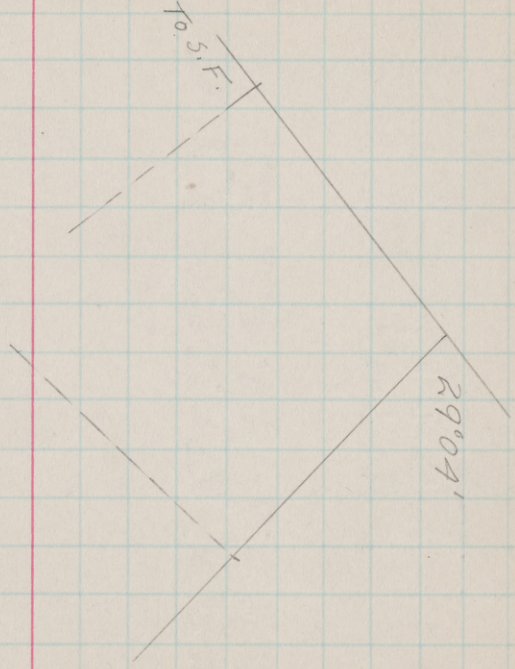
#2



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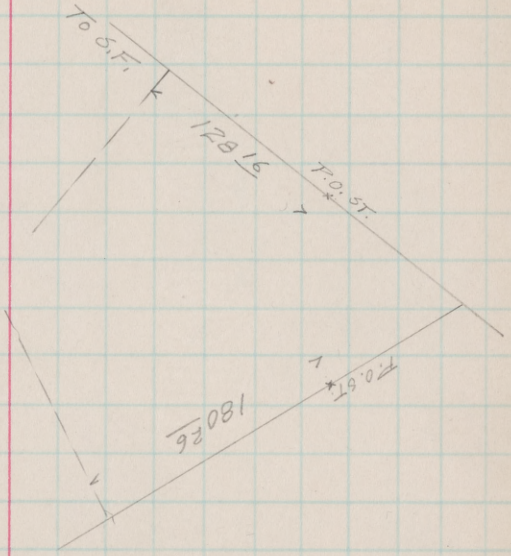

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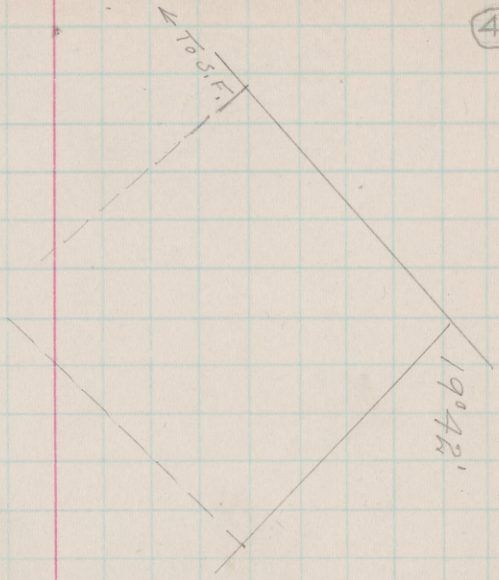

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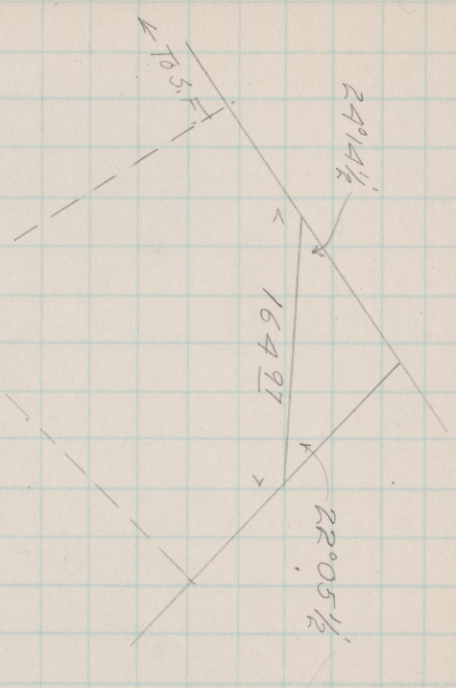

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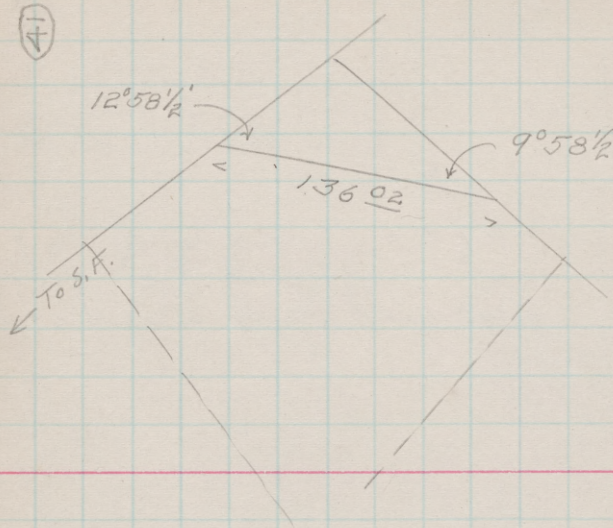

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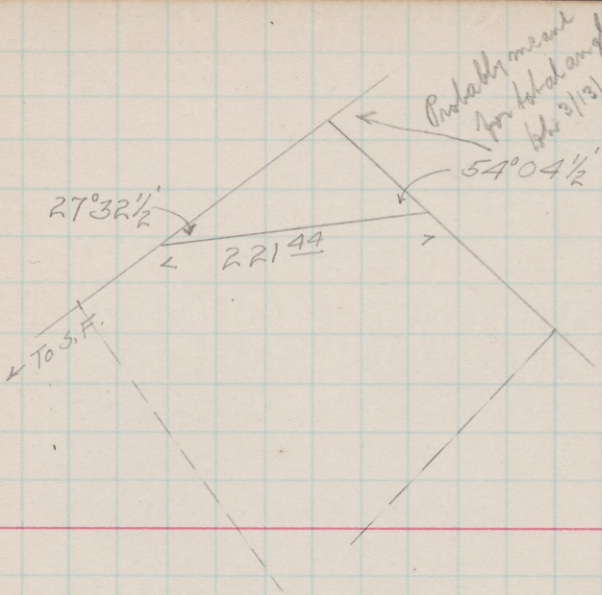

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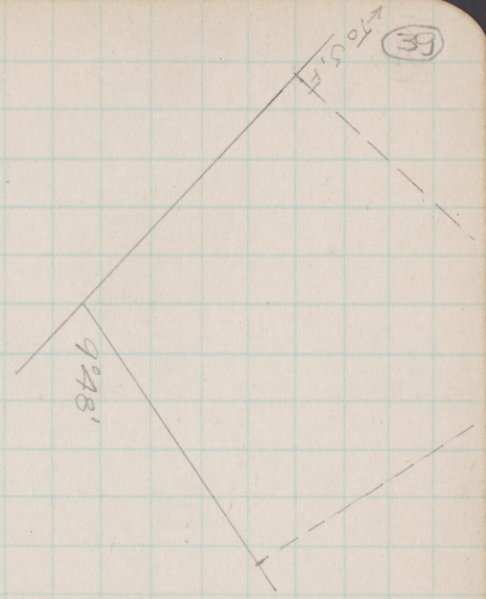

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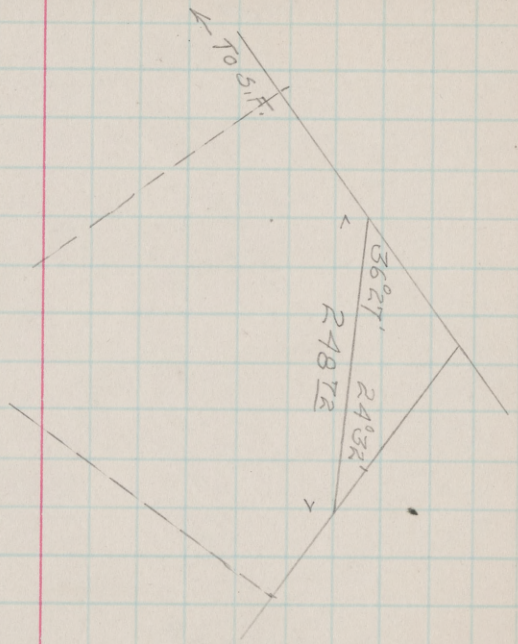

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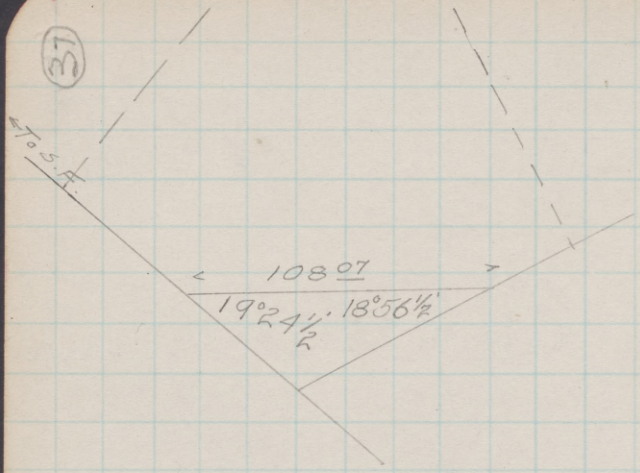

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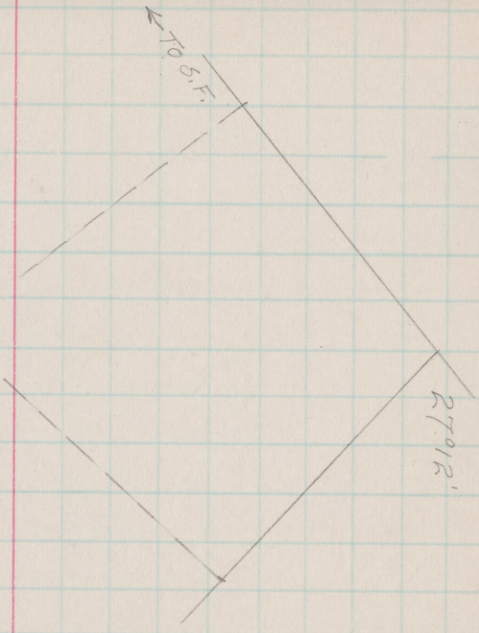

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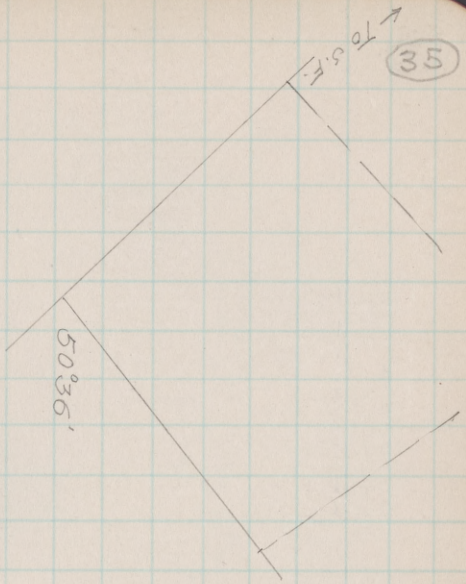

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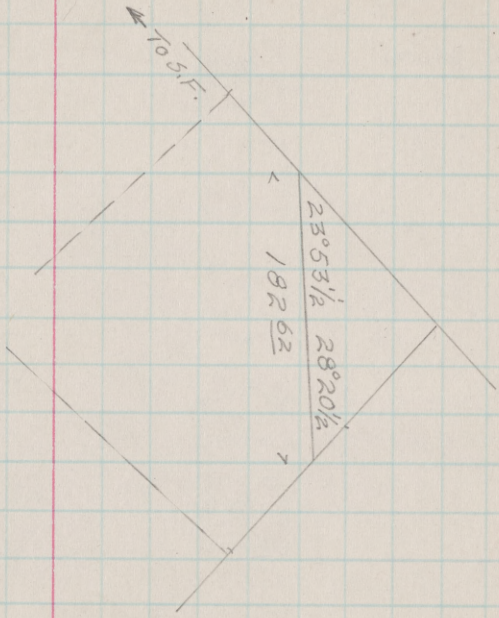

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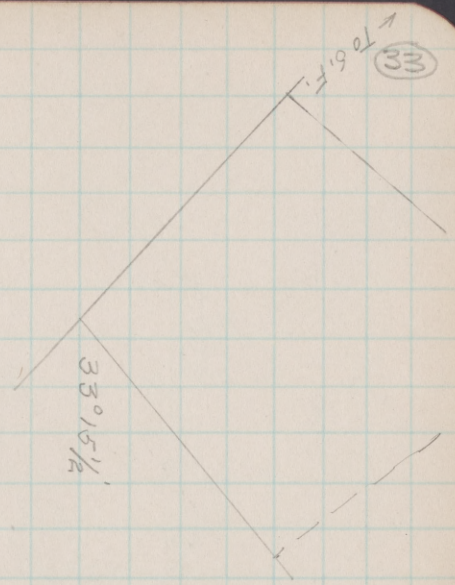

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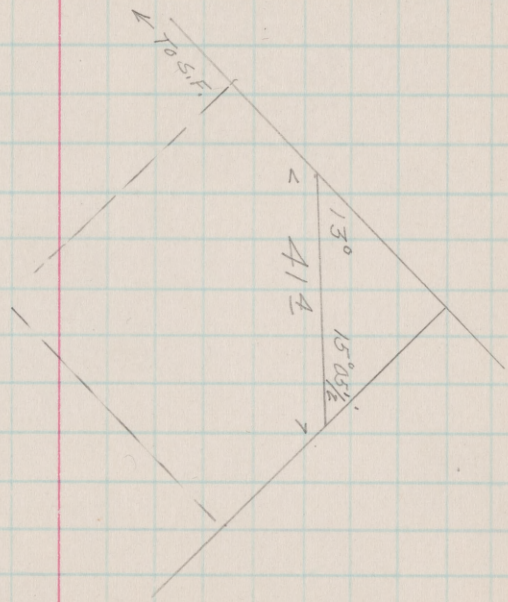

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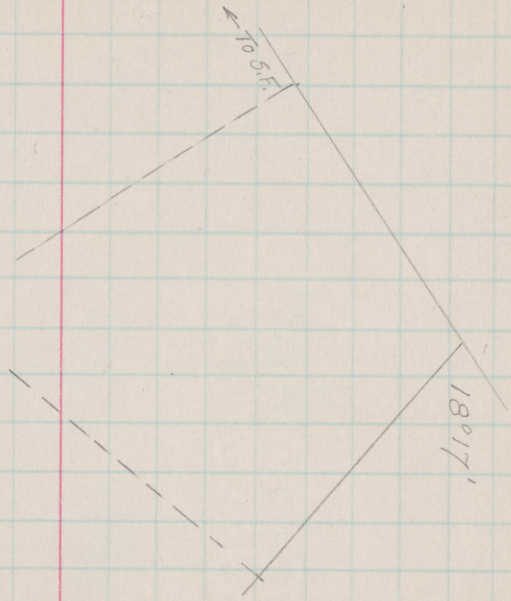

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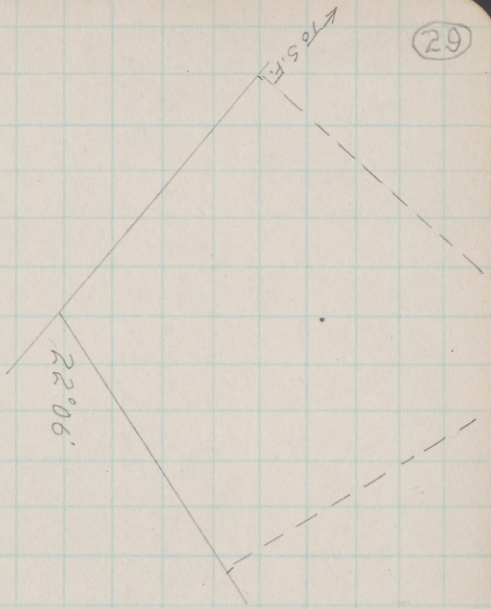

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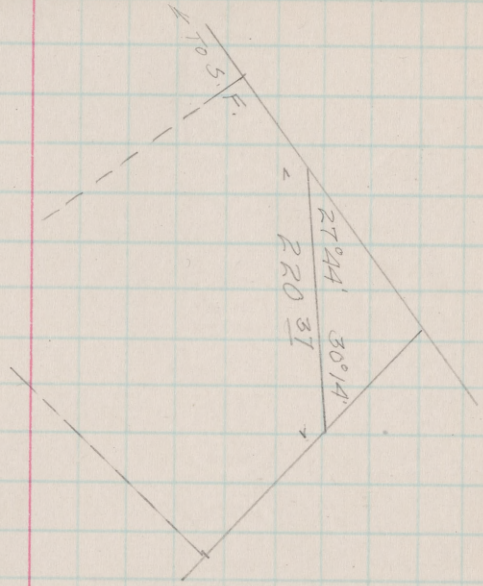

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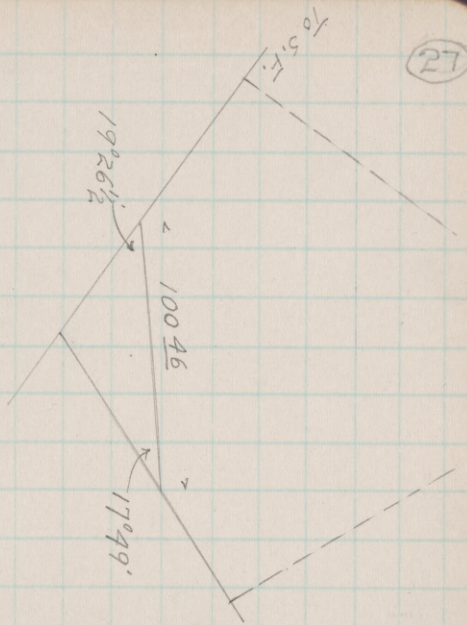

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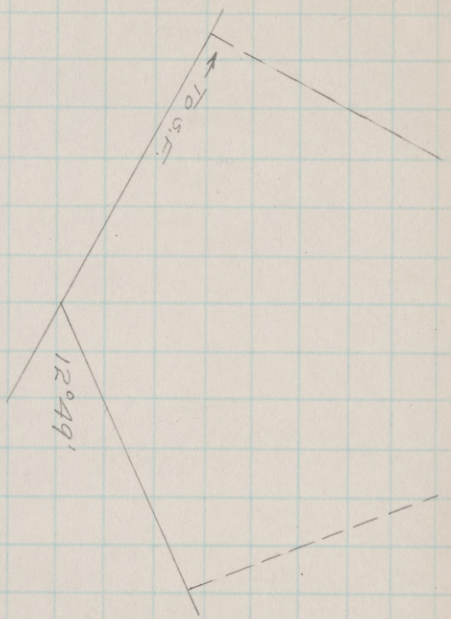

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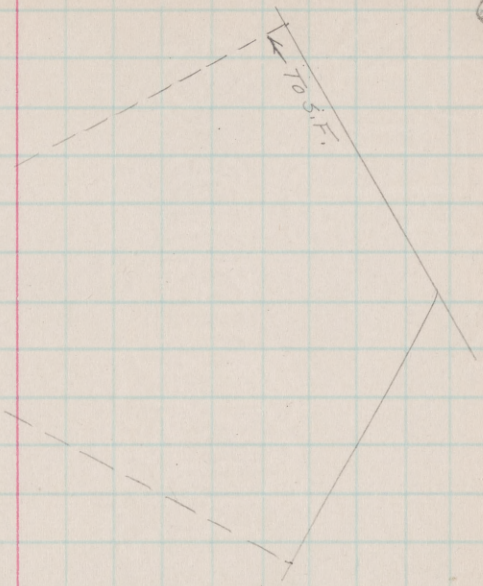

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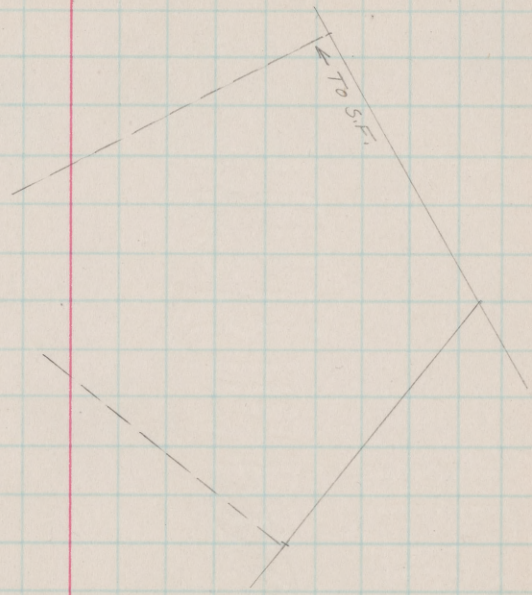

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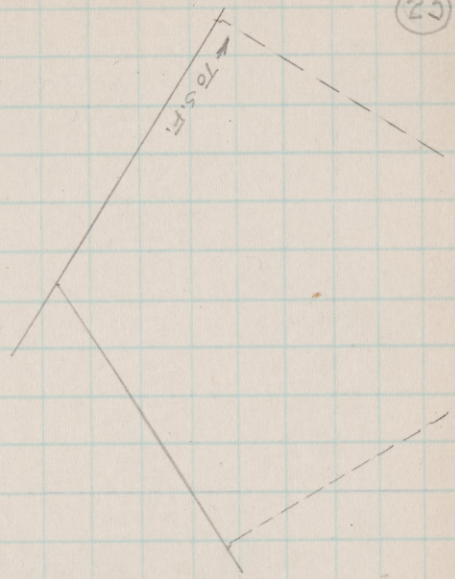

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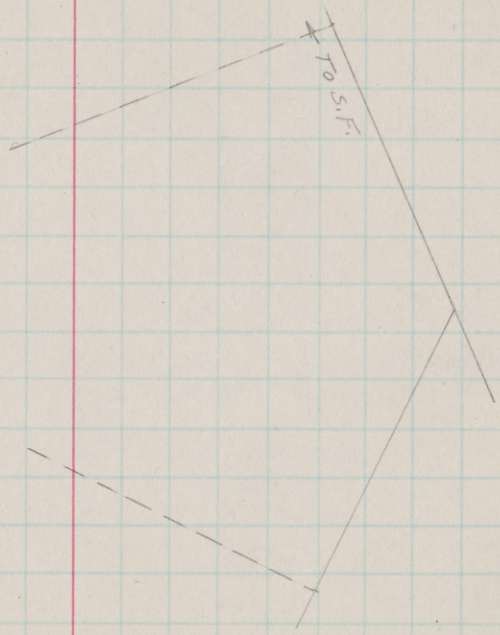

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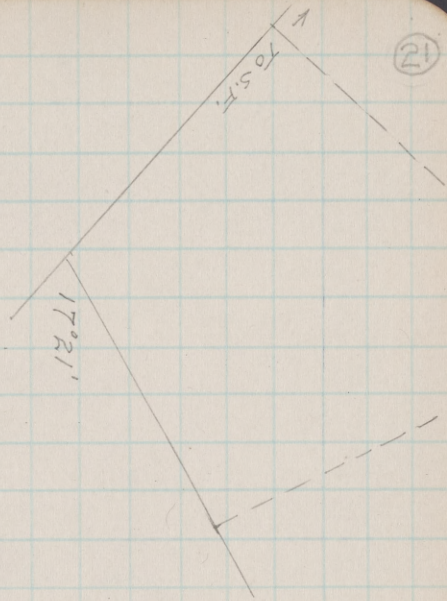

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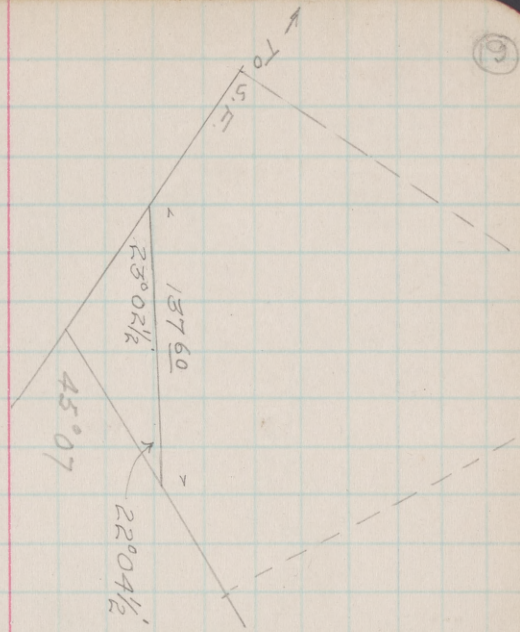

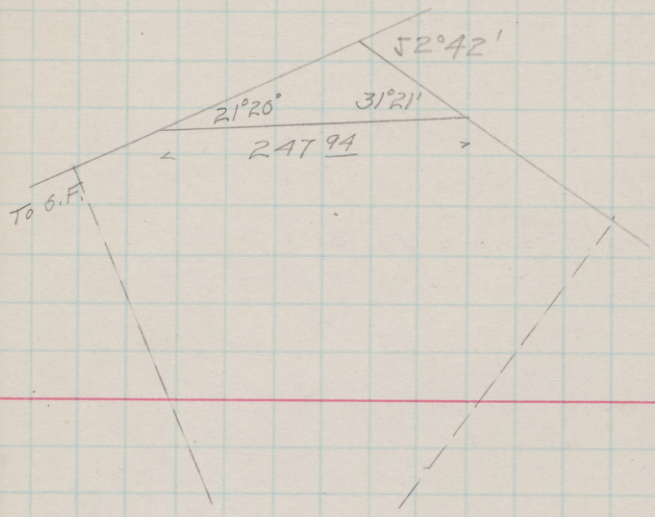

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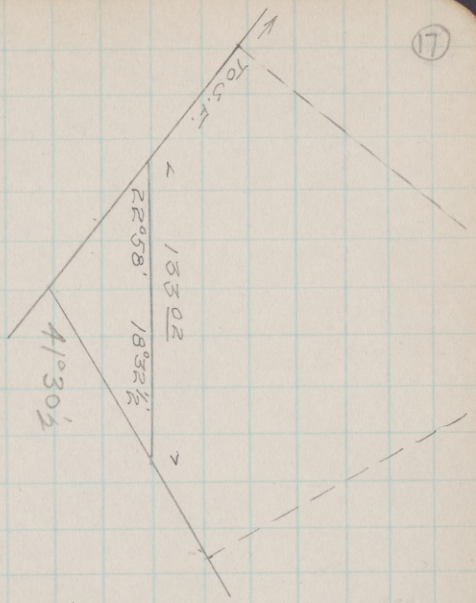

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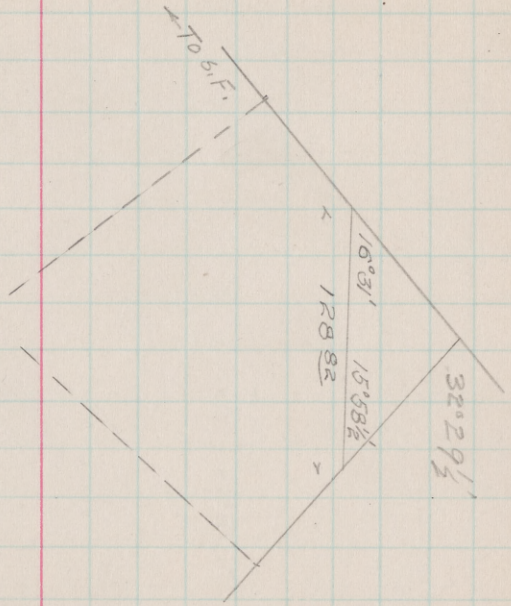

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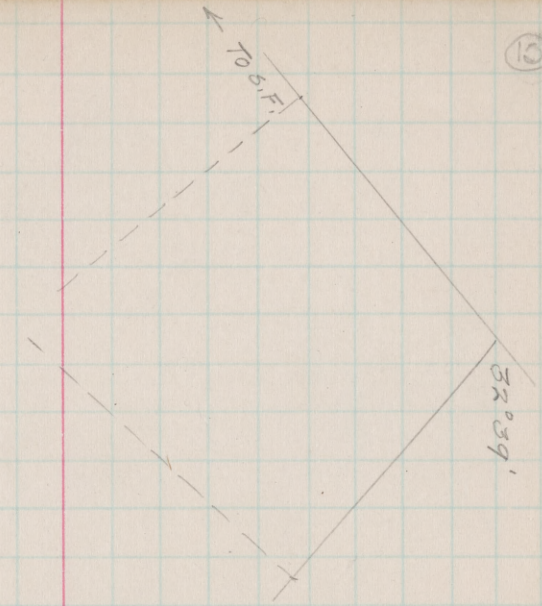

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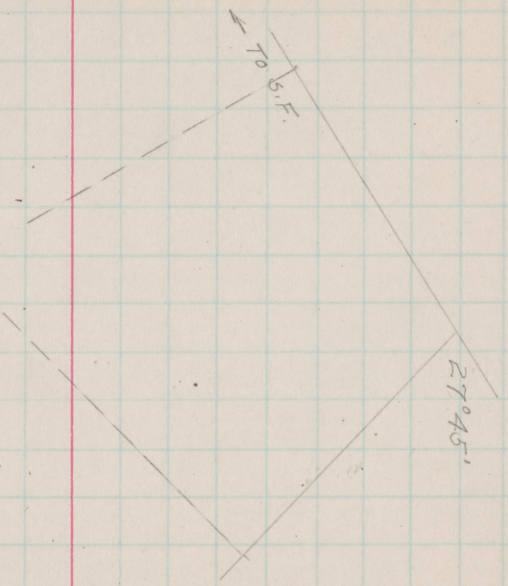

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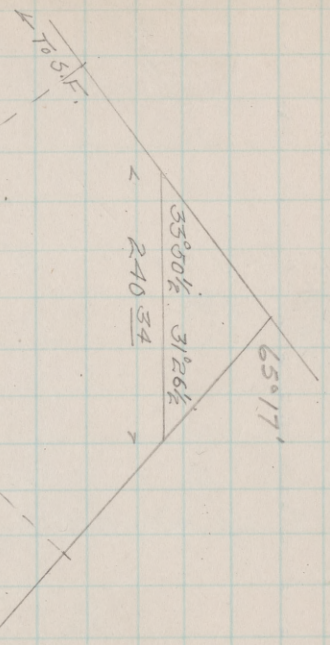


#36

6750+97 43 E.C.

6748+87 43 C.C. T-2

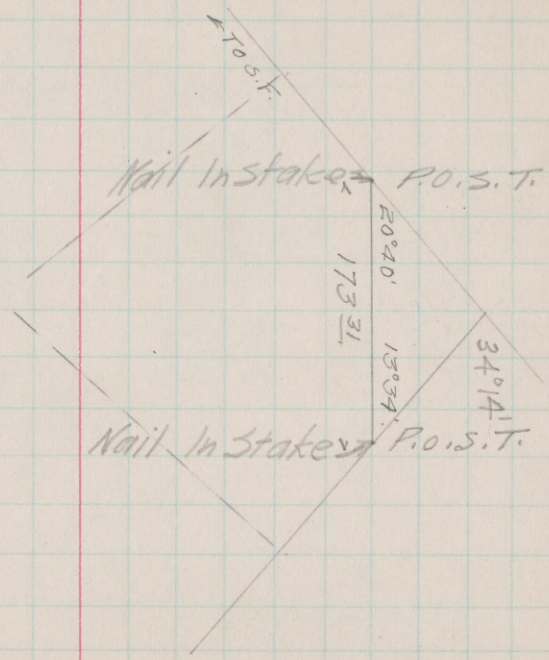
6746+69 52 C.C. 8° Rt

6744+59 52 B.C. T-2

T-2 $\Delta = 8°24'$
Length = 210.00

8°00' Rt $\Delta = 17°26'$
Arc = 217.91

T-2 $\Delta = 8°24'$
Length = 210.00



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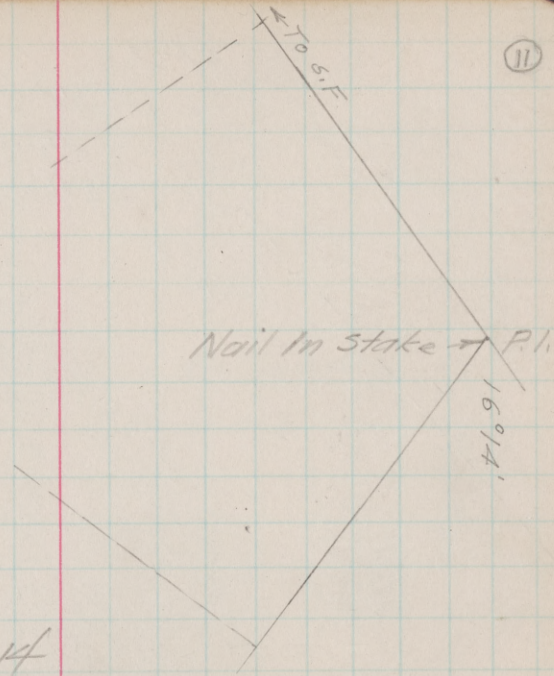


67+56+22 01 F.C. T-2½ Δ = 4°30'
Length = 120.00

67+55+02 01 C.C. T-2½
7°30' Lt Δ = 7°14'
Arc = 96.44

67+54+05 57 C.C. 7°30' Lt
T-2½ Δ = 4°30'

67+52+85 57 B.C. T-2½ Length = 120.00

Note- Centered By K.Kwast 5-14
Tangents Established, P.I. Set, Angle Ascertained, Etc.
By K.T.R. 6-14

#38

6768+68.05 E.C.

6767+18.05 C.C. T-3

6761+90.39 C.C. 15°Lt

6761+15.39 B.C. T-4

T-3 $\Delta = 11°15'$

Length = 150.00

15°00' Lt. $\Delta = 79°08\frac{1}{2}'$

Arc = 527.66

T-4 $\Delta = 5°37\frac{1}{2}'$

Length = 75.00

Note - WestEnd Centered By F. Kwast.
EastEnd Adjusted, P.O.S.T.'s Set
Angles Ascertained, Etc., By W.J.K.

6-14

#39

6773+72 ^{82} E.C.

6773+12 ^{82} C.C. T-4

6771+15 ^{15} C.C. 12°30' Rt

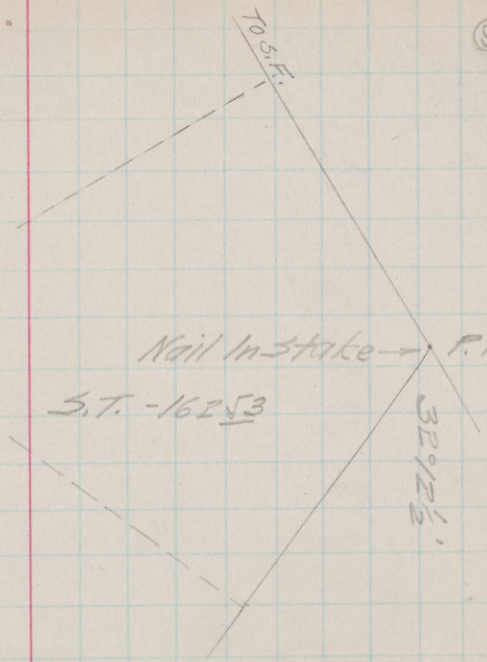
6770+55 ^{15} B.C. T-4

T-4 Δ-3°45'
Length-60 ^{00}

12°30' Rt Δ-24°42½'
Arc-197 ^{67}

T-4 Δ-3°45'
Length-60 ^{00}

W.J.R.
6-14



W.J.K.

6-14

#40

6781+08 25 E.C.

6780+18 25 C.C. T-3

6778+62 33 C.C. 10° Rt

6777+72 33 B.C. T-3

6777+72 33 B.C. T-3 =

6777+72 70 P.O.T. =

T-3 Δ-4°30'

Length - 90.00

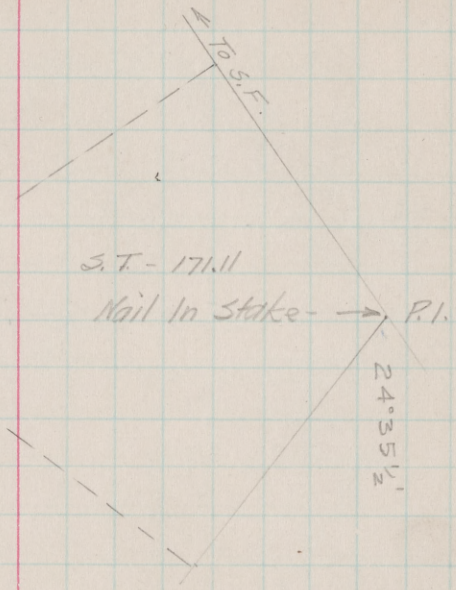
10°00' Rt Δ = N°35½'

Arc - N 92

T-3 Δ-4°30'

Length - 90.00

Equation -



#41

6791+64 44 E.C.

6789+54 44 C.C. T-2

6786+32 57 C.C. 8°24'

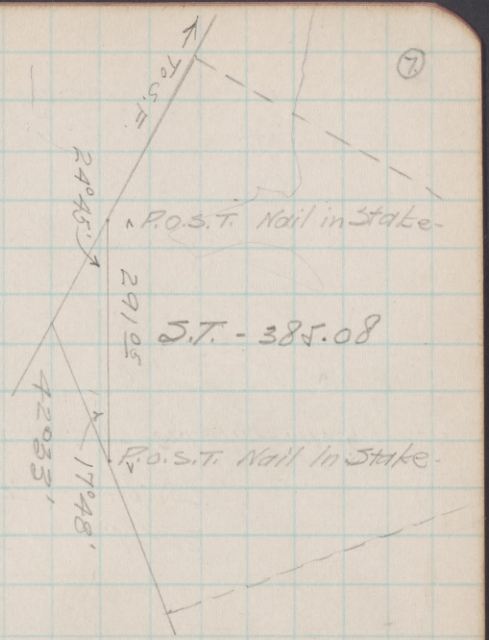
6784+22 57 B.C. T-2

T-2 - Δ = 8°24'
Length = 210 00

8°00'24" Δ = 25°45'
Arc - 321 87

T-2 Δ - 8°24'
Length - 210 00

Centered By F. Kwast 5-14
P.O.S.T.'s Set, Angles Ascertained, Etc.,
By W.J.K. 6-14.



#42.

6898+90.24 E.C.

6898+00.24 C.C. T-3.

6896+29.03 C.C. 10° Rt

6895+39.03 B.C. T-3

T-3 Δ = 4°30'

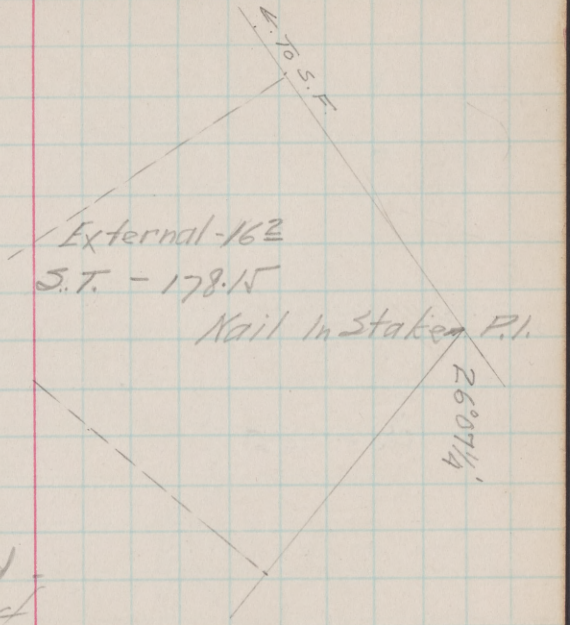
Length - 90.00

10°00' Rt Δ = 17°07'14"

Arc = 171.21

T-3 Δ = 4°30'

Length = 90.00

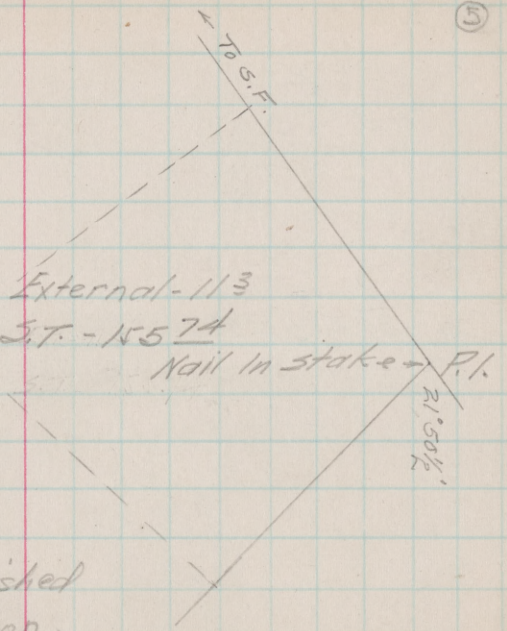


Note - Engr Stationing Approximated -
Centered By F. Kwast 5-14
P.I. Set, Angles Ascertained, Etc.,
By W.J.K. 6-14.

#43

(5)

6810+16 56	E.C.	T-3 Δ=4°30'
		Length = 90.00
6809+26 56	C.C. T-3	
		10°00' R+ Δ=12°50½'
		Arc = 128 72
6807+98 14	C.C. 10° R+	
		T-3 Δ=4°30'
6807+08 14	B.C. T-3	Length = 90.00



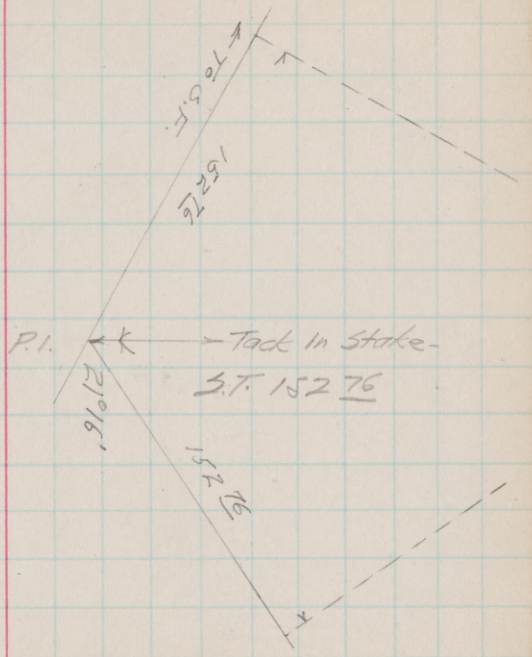
Note. Engr Stationing Not Well Established Here - This is Good Approximation.
Centered By F. Kwast - 5-14
P.I. Set. Angles Ascertained, Etc., By W.D.K. 6-14.

#44

N.J.R.-

6-14

6815+98 31	E.C.	T-3 Δ = 4°30'
		Length = 90.00
6815+08 31	C.C. T-3	
		10° Lt Δ = 12°16'
		Length = 122.67
6813+85 64	C.C. 10° Lt -	
		T-3 Δ = 4°30'
6812+95 64	B.C. T-3	Length = 90.00

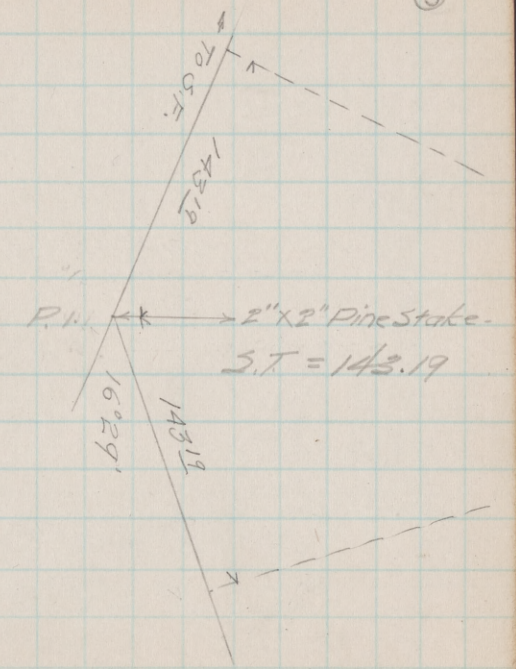


W.J.K. #45

6-11-14

6820+35 35	E.C.	T=2 3/4 Δ=6°00'
		Length = 120.00
6819+15 35	C.C. T-2 3/4	
		10° Lt. Δ=4°29'
		Length = 44.83
6818+70 52	C.C. 10° Lt.	
		T-2 3/4 Δ=6°00'
6817+50 52	B.C. T-2 3/4	Length = 120.00

③



#46

N.I.R.

6-12-14

T-3 $\Delta = 9°45'$

Length = 138.00

14°10' R $\Delta = 41°02\frac{1}{2}'$

Length = 289.20

T-3 $\Delta = 9°45'$

Length = 138.00

682.9 + 68.94 E.C.

682.8 + 30.94 C.C. T-3

682.5 + 71.34 C.C. 14°10' R

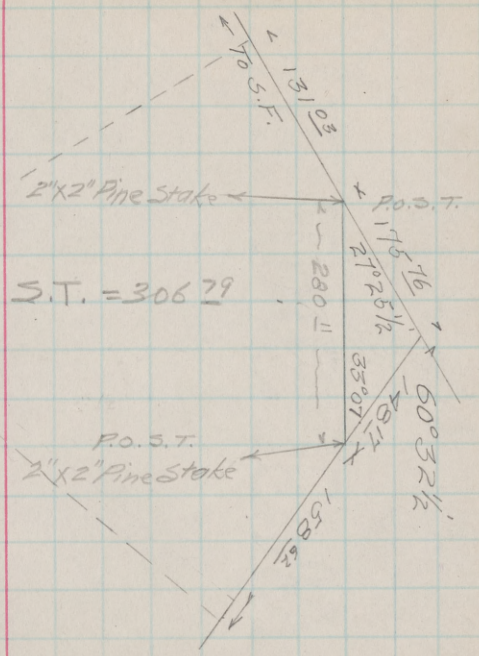
682.4 + 03.34 B.C. T-3

Note — T-3 to 14° curve —

Total Ford Defl. = 3°34'

" Back " . = 6°11'

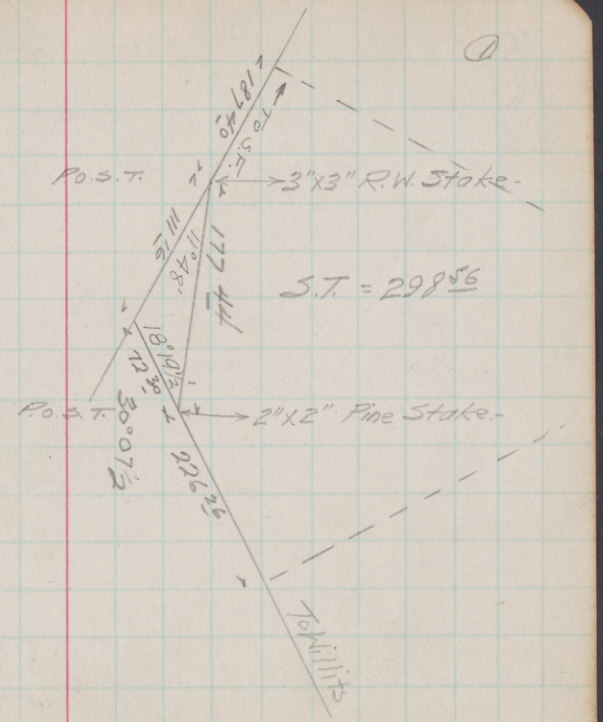
Long Chord = 137.84



N.J.R. #47.

6-14-14

~~6842+89 76~~	E.C.	T-2 $\Delta = 8°24'$
		Length = 210.00
6840+79 76	C.C. T-2	
		8° Lt $\Delta = 13°19\frac{1}{2}'$
		Length = 166 56
6839+13 20	C.C. 8° Lt	
6837+03 20	B.C. T-2	T-2 $\Delta = 8°24'$
		Length = 210.00



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"	" 57-60	Stadia Notes for Topographic Map ✓	9-2-14
Valley Ford	" 61-65	Raise Grade ½ Mile East ✓	9-5-14
Dodds Spur	" 66-68	Layout of Spur ✓	10-20-14
Markham	" 69-72	X-Sections on Trestle-New Line ✓	10-20-14
Duncan Mills	73	X-ing Frogs on Wye ✓	10-23-14
" "	73	Exchange of Property ✓	
B-Street	" 74-75	X-Sections; Ele's Curb, Gutter, etc. ✓	11-2-14
"	" 75	Levels ✓	1-2-15
Waldo	" 77-81	Survey Company Property ✓	11-30-14
Corte Madera	" 83	" " " ✓	12-10-14
Waldo	" 84-5	X-Section Notes. ✓	12-31-14

Freight Delays At Valley Ford.

9-23 | 5:20 P. Arrive
5.33 P.M. Departed

89+50 N.E. of Trestle Approx

92+05.3 = Ass - 92+00.0

1.14

1/2 Xtra Man Stay after Friday Noon

	6.32
5.13	5.00
3.97	1.32
1.16	